Clinical Lectures ON DISEASES OF THE CHEST.

Delivered at Charing-cross Hospital,

BY HYDE SALTER, M.D., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, PHYSICIAN TO CHARING-CROSS HOSPITAL, AND LECTURER ON THE PRINCIPLES AND PRACTICE OF MEDICINE AT ITS MEDICAL SCHOOL.

LECTURE VI.—PART II.

ON THE HÆMORRHAGES OF HEART DISEASE.

HITHERTO the only form of cardiac hæmorrhage that I have spoken to you of has been hæmoptysis. But I have seen many others. One of the commonest, next to hæmoptysis—which is, however, beyond all comparison the commonest,—is purpura. Purpura in connexion with and dependent upon heart disease is by no means an uncommon thing. One of the most remarkable cases that I ever saw, and which some of you must remember, was that of a man who was under my care in September, 1868, from the history of whose case I will read a few extracts.

CASE 6.—John M——, aged thirty, a well-grown man, but pale and puffed, by occupation an engineer, single, temperate, and never having had rheumatism, was admitted into the hospital, with all the ordinary symptoms of heart disease and a double aortic murmur, on Sept. 16th. He had been subject to incredible hardships and privations, and during the last winter and spring walked altogether between six and seven thousand miles in search of work. His symptoms first appeared about three months before his admission, by a sudden pang in the left breast, accompanied with breathlessness and palpitation, seizing him as he was walking up a steep hill in one of his journeys in search of work. From that time exertion never failed to bring on a recurrence of these symptoms. About five weeks before he was admitted, when he was still in the North, and before he had done his final bout of walking, his feet began to swell, and he noticed that his girth was increased, so that his waistband would not meet. A fortnight previous to his admission, while lying ill at home at Westminster, purpuric spots appeared on his legs, at first only a few about the ankle; they appeared first on the left leg, and four or five days after in a similar situation on the right. They gradually increased in number, and spread up the leg to the knee, which they had reached at the time of his admission. He had never seen anything of the kind before, and could not think what they were; he had never been particularly inclined to bleed or bruise, nor is there any trace of hæmorrhagic tendency in his family.

On admission the purpura formed a tolerably thick crop around the ankles, extending thence up the shin. For some few weeks it did not spread above the knee, but, on the contrary, was considerably reduced by the treatment which was adopted; so that a few days after his admission nearly all the spots were gone. Twenty grains of compound scammony powder for four or five consecutive days would clear away almost every spot. No sooner, however, was the hydragogue omitted than back they would all come again. It was curious to see how proportionate they always were to the other sign of circulatory stasis—the œdema. The scammony temporarily removed the œdema, and it removed the purpura too. Its intermission brought back the œdema, and with it the purpura. Two or three days' recumbency lessened the œdema, no more spots appeared, and the old ones faded; while if he was on his legs for a day or two the œdema increased, and a thick crop of fresh spots came out. After a little time the hydragogue treatment seemed to exercise less control over both the purpura and the œdema, and they gradually increased in spite of its frequent employment. The spots now formed a thick dense crop, covering the whole of the leg below the knee. In a short time a few scattered spots appeared above the knee, and, gradually becoming thicker, extended up the thigh. From the thigh they passed up to the buttocks, loins, and trunk, extending from the abdomen to the chest and thence to the arms, and, as they invaded fresh regions, becoming thicker and closer in the parts already occupied. Even now the vigorous employment of the scammony for two or three days would put a temporary stop to the extension; but it would do no more, and as soon as it was intermitted the process would go on again. At length every part was completely covered; and I do not think it would have been possible to have found a situation in any part of the body where a fourpenny-piece could have been placed between the spots. I never saw a case of purpura to be compared with it, either for the thickness of the points of hæmorrhage, or the universality of their distribution. There were, however, no large, diffused, subcutaneous vibices, and no internal hæmorrhages of any kind. In this state the poor fellow, finding all his symptoms gaining on him, and seeing how powerless treatment was effectually to stop their progress, left the hospital that he might die at home in peace. We did not, therefore, see the end of the case.

In THE LANCET for Jan. 19th, 1861, I published three cases of the concurrence of purpura with valvular disease of the heart. One was that of a girl, aged fifteen, who had had rheumatic fever two years previously, and was admitted with a loud mitral systolic murmur. Both the legs were covered with purpura from the knees to the ankles. She had had an exactly similar attack some months before, and had since been liable occasionally to a few spots, but always in the neighbourhood of the shin. The second case was that of a boy aged fourteen, also rheumatic, and also with a mitral systolic murmur. Five days after his admission spots of hæmorrhagic purpura appeared on the anterior aspect of his legs, most abundant on the front and inside of the shin; at first a thin sprinkling, but soon a thick rash. Under the influence of treatment which I will mention to you presently, both these cases were well in a fortnight. In the third case the age was greater, thirty-two, and there was no history of rheumatism; but the murmur was mitral regurgitant, as in the others. The man's constitution was broken down by drink, and his kidneys were affected. The purpura covered the front of both legs from the knee to the ankle, and the spots varied in size from that of a pin's head to that of a split-pea. Under treatment the œdema and purpura vanished together in ten days.

Epistaxis is another form of cardiac hæmorrhage of which I have seen several examples; and considering how marked are the evidences of venous turgescence in the head and neck in heart cases, and how easily the vessels of the nasal mucous membrane give way, it is a matter of surprise to me that it does not occur oftener. The most severe and persistent case that I have seen is that of a young girl who is still under my observation as an out-patient, whose case is full of interest in many points, but my remarks on which I will confine to this particular symptom.

CASE 7.—Bertha W——, aged sixteen, of a peculiarly florid complexion, the face being universally suffused with a deep crimson flush inclining to purple, turgid and vascular, and with all the symptoms of heart disease except dropsy, was born very thin and feeble (although at the full time), and up to three years old had a very delicate and fair skin; her complexion then became coarse, florid, and veiny, as it is now. About the same time palpitation and shortness of breath were noticed, but her health appeared unaffected, and she ran about the garden and played with her brothers and sisters like the rest. Between three and four years of age, possibly a little earlier, the bleedings at the nose began. From that time up to two years ago, since which time they have been much fewer, they occurred profusely five or six times a year. The nose would bleed all day without stopping (on one occasion it bled uninterruptedly for three days and nights), or it would continue at intervals for a week, the child bleeding for a few hours, then going to sleep, and then bleeding again. By the end of that time she would be completely blanched, as if she had no more blood in her. She would then take iron and quinine, and in a fortnight be as florid and bursting with blood as ever. She must therefore have had from forty to forty-five of these profuse attacks; and in some of them the loss of blood was apparently so great as to place her life in danger. All this time, too, she has been subject to severe headaches, which have been worst when she was most florid and purple, and always relieved by the bleedings. After the bleedings she felt her head clearer, and was able to work better at her lessons. She has never spat blood, or had purpura, or any other form of hæmorrhage except the epistaxis. The physical signs in this case appear to me

to point to tricuspid regurgitation as the sole valvular lesion.

There is another case of cardiac epistaxis at the present time in the hospital, which curiously resembles the above in two particulars—in the peculiar purple floridness of the complexion, and in the nature of the murmur, which is that of tricuspid regurgitation. The points in relation to the hæmorrhage are these:—

CASE 8.—Henry W——, aged seventeen, was attacked two years ago with the symptoms of heart disease, shortly after exposure to severe cold, but which did not give rise to any rheumatism. Soon after his heart symptoms commenced he began to suffer from attacks of profuse nose-bleeding. The first attack must have been within two or three months or so of his first heart-trouble, and his last attack was a week or two ago, since he has been in the hospital. He cannot say how many attacks he has had in this time, but he thinks about one every three months. Each time he has lost about half a pint of blood; but on one occasion the bleeding went on uninterruptedly for three days and nights. On this occasion he was very much weakened by the loss of blood, but on ordinary occasions he has felt the better for it. Ever since the supervention of his cardiac symptoms his head has felt giddy, confused, and full, and after these nose-bleedings it has felt lighter, and his eyes clearer and less misty. Before his heart became affected he never suffered from bleeding at the nose.

Three or four years ago a man was admitted into the hospital evidently in the last stage of heart disease. Two or three days after his admission he was attacked with profuse bleeding of the nose, which was so profuse and so ungovernable that, after many remedies had been tried and failed, both nostrils were obliged to be plugged. In spite of this, he lost blood largely every day, and became perfectly blanched and anæmic. The nostrils remained plugged up to the time of his death, for every day the bleeding broke out afresh. The man was reduced at last to the extremest degree of bloodlessness; and I have no doubt that the hæmorrhage, while it was the result of the heart disease, was itself a main cause of the rapidity with which he sank.

The next form of cardiac hæmorrhage to which I will direct your attention is one of which I have seen only a single example, and that but the other day—hæmaturia. Hæmaturia *with* heart disease is common enough; but not hæmaturia *from* heart disease. In all the cases in which I have previously seen this symptom and heart disease associated, the kidneys have been affected, and therefore no inference could be drawn as to the heart disease having favoured the hæmorrhage; but in this case it was not so, the kidneys were healthy, and the hæmorrhage appeared to be simply one among other expressions of cardiac circulatory stasis. When I read you the notes of the case you will at once remember the man.

CASE 9.—Laurence G——, aged forty, of fair and florid complexion, was admitted, with all the ordinary symptoms of heart disease, and with a mitral systolic murmur, on the 2nd of November, under the care of my colleague, Dr. Headland, who kindly directed my attention to him. Two months after his admission his symptoms became aggravated, the œdema of the legs increased, and an eruption of purpura appeared on the legs and thighs; at the same time a large ecchymosis appeared on the right upper eyelid, exactly similar to one resulting from a blow. This was on the 14th of January; the next day the urine was distinctly smoky, and after being filtered gave just a trace of albumen, but a mere trace—merely that which belonged to the blood, and which, blood being present, could not be absent. Blood casts were plainly detected by the microscope. On the 15th the blood had increased; on the 16th it was present in large quantity; on the 17th the quantity was less; and by the morning of the 20th the urine was clear and perfectly free from albumen. The ecchymosis covering the right eyelid underwent all the changes of an ordinary bruise; and in a few days had disappeared entirely. Previously to the appearance of the hæmaturia there was not a trace of albumen, or any other element pointing to renal disease, nor was there after; so that there could be no doubt about the kidneys not being organically affected. The patient continued to get gradually worse, and died suddenly from syncope on February 1st. Previously to his death the same symptoms reappeared, accompanied with a large extravasation in one of the eyelids and around the eye.

These, gentlemen, are the only varieties of cardiac hæmorrhage that I have myself witnessed; but other observers have seen and recorded other varieties, as into the muscular tissue, into the intestines, and into the stomach.

Of the causation of cardiac hæmorrhage there can be no doubt; it is evidently, as I have already pointed out to you, the hæmorrhage of rupture from distension, the distension arising from obstruction. In proof of this, we find, as a rule, that it only occurs in cases, and under circumstances, of extreme obstruction; that it is generally a late sign, preceded by œdema and other evidences of impeded circulation; that the most obstructive valve-lesions produce it the most, and that the seat of its occurrence is often determined by the seat of maximum obstruction; that what relieves distension relieves the hæmorrhage. Probably impaired nutrition of vessel wall, arising from the impeded and imperfect circulation, may diminish its resisting power and so facilitate its rupture. It has been supposed, too, by some that hypertrophy of the right ventricle is of itself sufficient to give rise to hæmoptysis, just as hypertrophy of the left ventricle is supposed sometimes to cause apoplexy; but I am inclined to agree with Dr. Flint of New York, that the hypertrophy of the right ventricle which sometimes exists in cases of cardiac hæmoptysis and pulmonary apoplexy would be a far less powerful and efficient cause of the hæmorrhage than the disease of the left side of the heart by which such hypertrophy is almost invariably accompanied.

But while we admit that the hæmorrhages of heart disease are the hæmorrhages of *stasis*, that the immediate and efficient cause of the vessel giving way is the obstruction to the circulation which the valvular lesion involves, yet it is evident there is some *tertium quid*, some further condition necessary, otherwise we should see the hæmoptysis, or other hæmorrhage, proportioned to the amount of obstruction, and universally present where that obstruction was great; whereas no such proportion exists. We often find cases in which the symptoms of circulatory stasis attain their highest development, and yet there is no hæmorrhage whatever; while in other cases the hæmorrhage will occur very early, and when other evidences of impeded circulation are slight, or altogether absent. This *tertium quid* I believe to be a certain amount of the hæmorrhagic tendency, or diathesis. And independent of the necessity of supposing the existence of some such predisposing cause of the hæmorrhage in order to explain the anomalies of its occurrence, there are two special circumstances that favour my belief in its existence. One is, that almost all the individuals in which we see cardiac hæmorrhage have the characteristic complexion which accompanies the hæmorrhagic diathesis—*fair* and *florid*. The other is that the majority of the cases are of rheumatic origin, and that there is undoubtedly a connexion between the rheumatic and the hæmorrhagic tendency. I am satisfied there is a certain class of patients, representing a certain type of constitution, and marked by an unmistakable *physique*, in which struma, rheumatism, diathetic hæmorrhage, chorea, and certain other morbid states are apt to occur, almost interchangably. If they have not one of them they have the other, or they have two or more of them combined, or in succession, or some members of a family have one and some another. Such people are fair, with delicate transparent skins, florid (if not anæmic), with hair either red or sandy, and light eyes with a good deal of eyelash. Such are the majority of cases in which we find cardiac hæmorrhage in its most aggravated form.

In relation to *diagnosis*, the value of hæmorrhage in connexion with heart disease is twofold: their relations are reciprocal, each may throw light on the other; the heart disease may explain the true nature of the hæmorrhage, while the hæmorrhage may lead to the detection of the heart disease. Of the first I have seen many examples; the case of Laurence G—— was a very striking one. His hæmaturia, unattended as it was with albuminuria, or any other symptom of renal or bladder disease, would have been inexplicable had it not been for his cardiac symptoms, which showed it to be the mere passive hæmorrhage of passive stasis, and to point no more to disease of the kidney than the purpura that accompanied it did to disease of the skin.

So far for the value of heart disease in diagnosing the nature of hæmorrhage. But what is the value of hæmorrhage in diagnosing heart disease? It is twofold: it may

point to the *existence* of heart disease; and, as I have said, it may, with a certain probability, point to its *nature*. I do not know that I have myself met with any case in which the *existence* of heart disease was diagnosed on the strength of the hæmorrhage, for in all my cases the previous existence of the heart disease was well known; but I have heard of such from others. I think, however, we can clearly see, in some of the cases that have been under our observation, a certain diagnostic value in the hæmorrhage as to the *nature* of the cardiac affection. Thus, in all the cases of mitral constriction, six in number, the hæmorrhage was hæmoptysis, unmixed with any other form of hæmorrhage; while in the two cases of tricuspid regurgitation the hæmorrhage was epistaxis, uncombined with hæmoptysis or any other form of hæmorrhage. This distribution of the hæmorrhage in relation to the seat of the valve-lesion is perfectly intelligible. If the injury is on the left side of the heart, the obstruction to which it gives rise retrogrades directly on the pulmonary circulation, and you get hæmoptysis; if it is on the right side of the heart, it retrogrades directly on the systemic venous system, and you get epistaxis, or some other form of systemic bleeding. In other words, the law is, that those vessels give way, and are the seat of the hæmorrhage, that are placed next behind the point of obstruction. Hence, the occurrence of hæmoptysis in cardiac cases, unaccompanied with any other hæmorrhage, would point to the disease being on the left side of the heart, and if it occurred early, while the general symptoms were but little developed and there was no œdema, would, in my opinion, almost infallibly point to mitral constriction; while the occurrence of epistaxis, or some other form of systemic hæmorrhage, unaccompanied by hæmoptysis, would raise a reasonable suspicion of the existence of mischief on the right side of the heart.

The occurrence of cardiac hæmorrhage is, in relation to *prognosis*, an unfavourable sign as far as the heart disease is concerned, because it indicates that the organic lesion has attained considerable proportions, and is exercising a fatally obstructive influence on the circulation; it indicates the arrival of that state of things by which heart disease is generally brought to a close, and so gives the patient but a short outlook. I do not know any symptom of worse prognostic import, except the existence of advanced œdema, and in some cases I can conceive (indeed, my cases prove, as I shall presently show) that hæmorrhage may be a worse sign than œdema—a sign of more immediate danger, as indicating greater stress and strain on the circulation, and as constituting a danger *per se*. But while the occurrence of hæmorrhage has a very unfavourable influence on the prognosis of the heart disease, the prognosis of the hæmorrhage itself is not as a rule unfavourable. In the cases of E. A——, J. M——, A. G——, and L. G——, the heart disease terminated fatally and speedily, but the hæmorrhage had nothing to do with the fatal result, and did not accelerate it in the least.

Such then is the rule of the prognosis of cardiac hæmorrhage;—very bad as far as the heart disease goes, but favourable (that is, not implying any danger) as far as the hæmorrhage itself goes. Now let me direct your attention to some of our cases which are striking exceptions to both these rules—exceptions that show, on the one hand, that cardiac hæmorrhage may comport with the great prolongation, perhaps even the *indefinite* prolongation, of life, and, on the other, that it may itself kill the patient, and that speedily.

We have had three cases under our observation, showing to what a degree life may be prolonged after the occurrence of cardiac hæmoptysis.

The first is that of Emma C——, a young woman, whose case I directed your attention to on a former occasion in relation to the subject of presystolic murmur. There was an interval of two years between the first appearance of cardiac hæmoptysis and her death. During that interval she had many attacks, each of some weeks' duration; and what is remarkable is, that towards the close of her case the hæmoptysis almost entirely ceased.

The second case is a still more striking one, for the subject of it is alive now, and is regularly attending, as an outpatient, my colleague, Dr. Pollock. His name is John M——; his age is now twenty-seven; he was in the hospital about a year ago, and you may remember that I directed attention to his case also in my lecture on Presystolic Murmur. He began to spit blood about four years ago, as soon as the aggravated cardiac symptoms set in, and continued to do so off and on for three years, when it gradually ceased.

But the third case is the most remarkable of all. This, too, was one of the cases of my lecture on Presystolic Murmur. It is that of Fanny B——, who, at the time that I first saw her and admitted her into the hospital, nine years ago, was nineteen years of age. About two months before I saw her, having always enjoyed good health up to that time, she was suddenly seized with shortness of breath, to such a degree that she could not cross the room, and a week afterwards the spitting of blood appeared. The blood was in little pieces and bright, not profuse. When admitted, her dyspnœa was very urgent, and of the true cardiac type. She was obliged to lie very high at head, and was continually spitting blood. On examining the heart, a strong, rough presystolic murmur was at once detected. The blood-spitting went on for two years, and then gradually ceased, and now for some years she has seen nothing of it. When last I saw her, some few months ago, she was much better than I had ever seen her before; her symptoms had almost disappeared, and the murmur was much fainter. It was impossible to doubt that the state of things at the mitral orifice was much improved. In what way a mitral valve so damaged as to give rise to such an extremity of dyspnœa and so persistent an hæmoptysis could ever so recover itself as to be compatible with easy breathing and cessation of almost all symptoms, I will not now discuss. What I wish to impress upon you is, that cardiac hæmoptysis of severe type may be compatible with an indefinite prolongation of life, and with an ultimate restoration to something very like health.

Now turn to the other side of the picture. Is cardiac hæmoptysis ever itself a source of danger? What say the authorities on this point? They either say nothing special on the subject, or they tell us that they have never seen the hæmorrhage large in amount, or such as to constitute grounds for apprehension. But what say our cases? In two of them the loss of blood, together with the lung infarction, unquestionably played a part in bringing about the fatal issue, although the patients could not be said to have died of the loss of blood pure and simple. But I have seen two cases in which this actually took place—in which the patients simply bled to death from cardiac hæmoptysis. One was the case of a man admitted into King's College Hospital when I was house-physician there, some nineteen years ago. He was admitted on account of the hæmorrhage, and was spitting blood when he came in, like a person in the height of an attack of the hæmoptysis of phthisis. Everything was tried to arrest it, but in vain; and in twenty-four hours he bled to death. On the examination of the body nothing was found but advanced mitral disease, and the lungs a mass of pulmonary apoplexy. I should mention that the nature of the case was diagnosed, and the murmur verified, before death. The other case was that of a boy who died from the same cause, in this hospital, about ten years ago. He had previously been admitted under my care with all the signs and symptoms of mitral disease, and had left somewhat relieved. He was soon, however, re-admitted much worse, and within a day or two of his return the hæmoptysis appeared. From the time of its appearance it rapidly increased, soon became profuse, resisted all treatment, and terminated fatally within two days.

And now, in conclusion, let me say a word or two about *treatment*. The only rational treatment of cardiac hæmorrhage is a treatment based on its nature and mechanism. If the hæmorrhage is mechanical, the treatment of it must be mechanical; if it depends on hypertension of the blood in the vessels, it can only be relieved by diminishing their tension. You cannot, unhappily, diminish the tension by removing the source of obstruction—that is beyond your reach; the only way in which you can do it is by reducing the amount of the circulating fluid. Jalap, and scammony, and elaterium, are the best antagonists of cardiac hæmorrhage I know; they draught away large quantities of serum from the bowels, and thus diminishing the intravascular pressure, remove for a time the cause of the hæmorrhage. In some of our patients the effect of this treatment has been very striking. In the case of Emma C——, the hæmoptysis always ceased for a time after the operation of a scammony powder; and in the case of John M——, twenty grains of the same drug, given two or three days consecutively, would, as I have already mentioned,

clear away almost every spot of purpura. Such an effect is, of course, but temporary, and requires frequent repetition; the quantity of the blood is soon made up, and things are just as bad as before.

When I say that this is the *only* rational treatment, I ought perhaps to admit that anti-hæmorrhagic remedies, such as turpentine, iron, acids, &c., may possibly be of some value in cases where the complexion and *physique* imply that the patient may be constitutionally hæmorrhagic; but I should not like positively to affirm that I have ever seen them so.

ON HOSPITAL GANGRENE.

BY DR. WM. R. E. SMART, C.B.,
INSPECTOR-GENERAL OF HOSPITALS R.N.

DURING the period of active operations in the Canton river, 1857 to 1859, I was staff-surgeon of the hospital ship *Hercules*, stationed at Hong Kong for the reception of the naval sick and wounded. The ship had been for four years a hospital, and had received a great number of sick of tropical dysentery and malarious fevers. So long as the season was warm, and complete ventilation possible, no bad result happened to the wounded treated on board her; but in the cold winter months such ventilation was less practicable. Canton was assaulted on the 29th December, and the wounded were sent on board as soon as possible, so that the decks were crowded with sick and wounded—the latter being disposed of on the first deck, while the lower deck was full of dysenteric cases. Among the wounded there were fifteen burnt by the explosion of a powder magazine, so severely that four died of meningitic complications, one of trismus, and one of consecutive erysipelas. The copious discharges from these men served greatly to pollute the atmosphere, which affected all around alike; but in one only of the burns was there sloughing near the eschared surfaces, while nearly all the severe gunshot wounds took on that condition. In this case of burn the sloughing did not attack the eschared surfaces, and thus it confirmed the impression that the destructive action of heat is as much a preventive of hospital gangrene as the result of its remedial employment shows it to be a trustworthy curative.

The surgeon's duties after a battle arouse in him the same exciting tone of mind as prevails among his combatant brethren; but I know no circumstance so depressing to him as when, in his ministrations, he dreads, on removing dressings in cases that have borne operations well, where he has hoped for success, to find the indications of a fearful malady that may destroy his patient in a day or two. In such calamity promptness of action is demanded even beyond that called for in treating the wounded primarily; but he may rest assured that, by promptness in the unflinching application of approved means, he will succeed in enabling his patients to stem the adverse current.

In those days the powerful agents we now possess in carbolic acid and the permanganates were unknown. Later experience would incline me to depend on the former as a preventive and on the latter as a curative agent. The surgeon may still, however, be similarly placed without having those means at hand, and then he may find that much can be done with other means. On the occasion I refer to the general principles adopted were: 1st. To improve and maintain ventilation as thoroughly as possible. 2nd. To disinfect the atmosphere with chloride of lime in vessels placed under the beds, or with chloride of zinc solution on wetted cloths hung up in the wards. 3rd. To support the strength of the wounded by the best diet to be obtained for them. 4th. To obviate contagion by discarding sponges, tow, &c., in dressing the wounds; for which a clean earthen vessel containing water, a caoutchouc bottle, a pail to receive the washings and foul dressings, and a glass syringe for the medicated lotions, are the simplest and the best appliances. 5th. To give opium and dietetic stimulants freely to the infected. 6th. As it is a local malady, every germ of the disease must be destroyed, together with all the tissues that are affected by it, and a line of demarcation formed beyond those tissues; and therefore, as a rule, wherever there are signs of this terrible *pourriture d'hôpital*, the surgeon must not hesitate to lay wounds open again, and to apply strong fluid caustics boldly, not refraining from injecting them into the surrounding tissues, and to have recourse to the actual cautery when the surfaces involved are large, and widely or deeply affected, or where fluid caustics have failed.

In illustration of the advantages of such treatment, I select from my Case-book two instances, in one of which strong solution of the chloride of zinc was used where the scalp had become affected in a compound fracture of the skull, and in the other the actual cautery was very freely employed to obliterate the diseased action in the deepest part of a stump formed above the insertion of the deltoid. If the stump had been of the thigh, I would have treated it in the same way.

Military surgeons cannot always possess the more refined means of treatment for such cases, but they can rarely be placed where fresh air, pure water, and a fire are not at their command, and I think that by the use of these simple means very much can be done, when hospital gangrene displays its fearful front among the wounded in battle, to mitigate its ravages and to destroy its contagious germs. At all events it is the peculiar province of military surgeons to know how to employ the commonest resources, so as to feel confidence in them when no others are available, as too frequently happens to them.

CASE 1.—On Dec. 29th, 1857, J. A——, aged twenty-seven, was wounded in the head at the capture of Canton, and arrived at Hong Kong on the 31st. There was compound fracture of the left parietal bone above the protuberance, without escape of cerebral substance. The fracture was almost circular, the size of a half-crown, with about one-fourth of its lower limbus attached; a fissure extended from one extremity of this fracture towards the centre of the circle, and much matted hair was lodged under the edge of the fracture. The physical signs were of concussion, followed by those of congestive irritation of the meninges.

Ninth day.—The scalp became puffy, and the subcutaneous tissues spongy. Incisions were made through the integuments, and a chlorinated soda wash applied.

Tenth day.—The ill-condition of the parts had extended. He was more intelligent; eye pale; pupil contracted; pulse 96, when seated; recurrent slight hæmorrhages. Injected with a glass syringe under the flap of integuments Burnett's solution of chloride of zinc. Allowed a pint of beef-tea, and half a pint of port wine.

Eleventh day.—Extension of the destructive action along the aponeurosis, and recurrent hæmorrhages. Eye pale; pulse 120, feeble. Raised the flaps and found the aponeurosis sloughing widely, and hæmorrhage from an arterial branch surrounded by ulceration. Ligatured the vessel as deeply as possible, and applied Burnett's solution as before, pushing the nozzle of the syringe under the attached borders of the integuments. He took 20 oz. of port wine in twenty-four hours without causing any sensorial excitement.

Twelfth day.—Local improvement; scalp less puffy; action checked. He had diarrhœa in the night, but his appetite had returned, and his intellect was less confused. To use chlorinated soda wash; and to take chalk-with-opium mixture as may be necessary, and eight ounces of port wine.

Thirteenth day.—Pus secreted; diarrhœa checked; free from sensorial symptoms.

Fourteenth day.—Copious secretion of pus, bringing away sloughs of aponeurosis. Ligature separated without hæmorrhage.

Fifteenth day.—Soft structures granulating.

Thirty-third day.—Separation of a thin exfoliation. Complains of a sense of weight in the head.

Thirty-seventh day.—Removed an irregularly circular plate of external table resting on a central pedicle of carious diploe, which was surrounded by small florid granulations; a linear fissure extended half across the plate.

On the fiftieth day a tertian ague affected him severely, and disappeared on the fifty-seventh day under quinine.

On March 3rd, being the sixty-fifth day after the receipt of the wound, I removed a cuboid mass of the inner table and diploe, being the pedicle to the centre of the external

plate taken away on the thirty-seventh day. It measured five-eighths by three-eighths of an inch on its inner surface, and the fissure of the external plate extended through its substance.

After this the depression filled in and cicatrised. He complained of occasional giddiness, but was free from hemiplegic and epileptic symptoms. He soon returned to England.

CASE 2.—On Dec. 28th, 1857, J. F——, aged twenty-six, received injuries in firing a mortar in Dutch Folly Fort, opposite Canton. His left arm was amputated skilfully by double flaps, at the insertion of the deltoid, an hour after the accident. On the third day he arrived on board the hospital ship at Hong-Kong. Apyrectic; pulse 84; no complaint of pain in the stump.

Fourth day.—Apyrectic.

Fifth day.—Stump first dressed. Found the lips adherent, but the anterior flap was red at the margin, and some of its cuticle was vesicated. He was apyrectic. Removed the alternate sutures, and supported the flaps with adhesive plaster. Simple dressings. To take saline mixture.

Sixth day.—Pyrectic; redness and tension at the inner corner of the wound at the exit of the ligatures. Towards evening, leakage of blood, and the redness and tension of the stump increasing.

Seventh day.—Increased tension of stump along the vessels, and oozing of blood. Opened the wound, which was distended with clot and foul pus, and found the ligatures *in situ*. Scarified the inflamed integuments, applied wet lint dressing, and a provisional tourniquet. To take dilute sulphuric acid, with tincture of opium. There were frequent small hæmorrhages, and the stump became more tumid and painful, and restless pyrexia increased. At noon I separated the flaps to the full extent, and found their inner surfaces in a sloughy state, with blood oozing from several points, although the ligatures were safe. With the patient under chloroform I applied the only actual cautery I had at hand—a plaster-spreader, heated to redness—to all the bleeding points, and then used the chlorinated soda wash on lint between the flaps.

Eighth day.—He slept; tongue moist; pulse 90 and feeble; no leakage of blood or pus, and the stump less tumid. Ordered, chlorinated soda lotion; brandy mixture; and an anodyne draught as may be necessary.—6 P.M.: After sneezing, a sudden copious flow of blood from stump. Found the sloughing action general and deep; blood oozing from the sloughing parts and jetting from the posterior circumflex artery. I placed a ligature deeply on the circumflex, and, having all the ligatures carefully held aside, I applied very freely the actual cautery, approaching to white heat, on every part of the surface, pushing it firmly and deeply wherever bogginess was felt, and especially so into the pit where the great vessels lay. The gangrene having destroyed the centre of the deltoid and attacked the anterior flap, it was slit in two, and the cautery applied to the free edges. This was effected under chloroform. He was ordered chlorinated soda lotion, and to have brandy, and an anodyne draught if necessary.

Ninth day.—Slept; tongue cleaner; pulse 90, of good force; no further leakage of blood; slight purulent traces. Oiled lint was placed between the flaps, and chlorinated soda lotion applied to surface of stump. To have eight ounces of port wine, and brandy mixture *ad lib.*

Tenth day.—General improvement; pulse 100, bounding; tongue clean; bowels open; stump decreased in size; edges of flaps looking clean; deep sloughs adherent. Continue treatment, and add quinine mixture.

Eleventh day.—Copious discharge of laudable pus, and freedom from pain; tongue moist; pulse 110 and weak. Continue remedies.

Twelfth day.—Eschars detaching without oozing of blood, and stump secreting clean pus freely; appetite fair. Omit brandy; give twelve ounces of wine.

Thirteenth day.—Stump granulating healthily.

From that date the stump healed kindly, but more or less quickly according to the state of his system. Through the fourth week he had a sharp attack of constitutional disturbance with diarrhœa, during which the granulations were pale and indolent. As this state subsided, he began to suffer from severe otitis, having from the first complained of deafness in the left ear, which lay towards the mortar when it was fired. It ended in abscess of the middle ear, with destruction of the tympanum. In spite of these drawbacks, however, the stump healed kindly, and the man was sent to England.

London, Sept. 1870.

ON APHASIA.

BY J. A. THACKER, M.D.,

PROFESSOR OF PSYCHOLOGY AND DISEASES OF THE NERVOUS SYSTEM IN THE CINCINNATI COLLEGE OF MEDICINE AND SURGERY, CINCINNATI, U.S.

(*Concluded from page 430.*)

Now it is evident, if what I have stated be true, that speech is the result of what metaphysicians term the faculty of association—a faculty, if there be such a one, that no one knows anything about, more than that there exists in the human mind a potentiality of associating ideas together, so that one idea may bring up another, and this again another, producing an interminable train, unless something interferes to break the procession. And not only are ideas so associated that the occurrence of some particular one to the mind will call up another, but certain acts or muscular movements are oftentimes associated with certain ideas, so that the former are always suggested by the latter, and in turn suggest them. Of the last-mentioned class of associations (actions with ideas) I could give very many examples, but one or two will suffice. A little reflection on the part of the reader will call to his mind many others. The roar of the wild beast will cause the traveller, resting by the wayside, to start to his feet in preparation for escape, even when he is not exposed to danger, from having been accustomed to flee at the sound; and rapid flight on the part of anyone always suggests to our minds a threatening danger. The physician puts on his hat and seizes his cane, preliminary to setting forth to visit a patient, without employing any mental operation whatever; the idea is formed, and the associated act follows automatically.

Bernard very correctly states, in one of the sentences of his remarks which I have quoted, that, "in the education of the organs of speech there is consequently established between the auditive sensation and the vocal motion a veritable nervous circuit, which connects the two phenomena into a common functional object." To employ language more readily understood, an idea becomes associated with a certain sound proceeding from movements of the muscles of the tongue, larynx, &c., by means of the organs of hearing, so that when the particular sound occurs the same idea is awakened, and, *vice versâ*, the idea suggests the sound that has been heard to express it. The idea of danger not only tends to call into action the movements of escape, but rapid flight occasions thoughts of peril. So closely interwoven do words and ideas become by long-continued association that they seem to be inseparable, and lead to the error that there cannot be an idea without a word giving utterance to it, or formed in the mind expressing it. "A word is nothing more than the artificial mark of the muscular act of speech into which the idea is translated, and a name nothing more than a particular word appropriated to mark a certain idea, so that when heard or seen it may excite the same idea in our mind, or a similar idea to other minds." "But because its muscular acts," says Dr. Maudsley, "receive a special name—are called speech—they are not special in kind, and have not more a special faculty in the mind than any other definite co-ordinate movement has."

The little child possesses all the muscles necessary for emitting from the vocal organs a great variety of sounds, and organs of hearing for taking cognisance of them. As its cerebral hemispheres become developed, and the impressions received are organised into ideas, associations, first of the simplest character, begin to be formed, and by-and-by it learns from its educators to connect certain ideas with particular sounds, so that when the latter are heard the former come into the mind, and *vice versâ*. First it associates the word "Mamma" with its mother, and when it is able to lisp it itself by induced efforts at imitation it has taken its first step in language. It will thus be perceived that "in the education of the organs of speech there is

consequently established between the auditive sensation and the vocal motion a veritable nervous circuit, which connects the two phenomena in a common functional object."

Says Bernard, in the address before alluded to, "It has been said that silence is eloquent; ay, for those who cannot speak, and for those who, being initiated to all the emotions of the heart, feel that there then takes place something in us which words cannot express!"

Granted that the views which I have set forth are correct as to the mechanism of speech, what condition has been brought about in an individual suffering from aphasia? It seems to me that the most philosophical mode of accounting for the affection is to ascribe it to a destruction of the associations, which had been formed, of ideas and the various muscular movements which produced the sounds from the organs of speech representing them; in other words, the "ideo-motor intuition" no longer takes place when a thought enters the mind, and, therefore, there is no exciting current, as it were, conveyed from the sensorium commune through the motor nerves to the muscles of the larynx, tongue, &c. As I have said, an individual, when learning to speak, is taught to associate his ideas with particular sounds, and, possessing the mechanism in himself of forming the same sounds, an "ideo-motor intuition" or impulse results, which, when excited, enables him to make use of the words which he has connected with particular ideas. But certain changes having taken place in the structure of the brain tissue, not at a particular point, but generally throughout the nerve cells, the accustomed associations no longer occur, and the loss of speech or written language, or both, is the result—both alike being dependent upon ideo-motor intuitions from associating ideas and muscular movements, and follow upon the action of their own set of muscles, as is the way with intelligent signs and demonstrations of every kind. Every mode of giving external expression to what is passing in the mind is a language so far as it goes, and, when employed, results upon associating the idea and the particular action constituting the "ideo-motor intuition" of that language.

Many illustrations could be given of the obliteration, by cerebral changes, of the so-called faculty of association in other instances than we see in associating ideas with particular movements of the muscles called in action in speech. In old age, the power of associating ideas together, so that one may call up another, becomes very much weakened, and is a great hindrance in carrying on mental processes of any kind. In the young it is active, and contributes largely to the ready remembering of facts; but as the vesicular matter of the cerebrum becomes modified by time—as the mind, as suggested by Herbert Spencer, proceeds more and more from the indefinite to the definite, unless it attains a definiteness inconsistent with its existence—it gradually fails and oftentimes disappears entirely. Again, the association which exists in the love of an individual of one sex for another of the opposite not unfrequently is obliterated either by traumatic injury or idiopathic disease; so also may the affection of parent for child be destroyed by the same causes, and even sometimes supplanted by hatred. True there are instinctive associations, but their character is not changed because they have not been acquired. When they have been acquired a potentiality existed, which is the foundation of nearly all of men's associations, and which constitutes a marked difference between them and the lower animals, in which nearly all are instinctive.

Dr. Maudsley suggests, among other explanations as the cause of aphasia, the loss of the *muscular sense* in the organs of speech; but as this sense has certainly no distinct existence like those of sight, taste, and smell, &c., the proposed explanation does not appear to me satisfactory. The "muscular sense" depends upon that of touch, and while it cannot exist without it, it is difficult to conceive of its being absent while the former is present. I do not know that it has ever been shown that anæsthesia of the organs of speech is a constant phenomenon. The muscular sense, too, if I rightly understand it, simply means muscular resistance, and how muscular resistance is involved in speech I do not fully comprehend. Surely in the case of amnesia of written language, which is often a feature in aphasia, there cannot be alleged a failure of the muscular sense.

Gall, as is well known, in 1809, first advanced the proposition that there is a faculty of language, and located it in the anterior lobes of the brain. In 1861, Prof. Paul Broca went further, and pointed out as its seat the third frontal convolution of the left hemisphere. In proof of his view he presented to the *Société Anatomique*, of Paris, two specimens obtained by post-mortem from two aphasics, and afterwards during the year other corroborative evidence from autopsies. Bouillaud and other distinguished Frenchmen gave their assent to this notion, and at different times it has been discussed, for and against, in the Societies of France, with much spirit, sometimes even approaching almost to violence. Further research, however, has now proved it beyond doubt to be incorrect; for examination of the brain after death has shown the particular convolution intact in persons aphasic during life; and, again, not only it, but the whole anterior portion of the left hemisphere destroyed in those whose speech had not been affected. It seems to me that our present knowledge of the anatomy and physiology of the nervous system is sufficient to disprove Gall's theory, and, as a consequence, that of Broca, without the support of autopsies; for the reason, as Dr. Maudsley points out in THE LANCET, that if there is a centre of language in the brain, all other portions of the encephalon concerned in the formation of ideas would have to be connected with it in order that their ideas might find expression in speech, which we know is not the fact. In fact, it would be necessary for it to be the centre of two sets of fibres, one bringing impressions of ideas from other parts of the cerebral hemispheres, and another connecting it with the organs of speech.

Of course, I would not attempt to explain the mechanism of the association of ideas with one another, and with particular muscular movements, or anything in regard to its essential nature. Mr. Mansel, in his very philosophical work upon the subject, proves that there is necessarily a limit to religious thought; and we may very properly consider that there is also a limit to physiological thought. It is a *property* which is as yet beyond our ken, and may always remain so. We are very well aware of the *fact* that in the physical world particular particles of matter, under favourable circumstances, cohere, but of the nature of the attraction of cohesion we are ignorant; also that, *under certain conditions*, a plant, with a nicety of discrimination truly wonderful, selects from the atmosphere about it and from the soil in which it is planted the elements favourable to its nutrition, rejecting all others; but how it does it—the subtleties of its nature which enables it—we know nothing. These are properties which we ought to be able to recognise, even if we do not understand their *modi operandi* and *know that they are properties*.

A distinguished writer states, and it seems to me very correctly, that conclusions respecting aphasia have been drawn too entirely from pathological observations, without regard to the important bearing which language in its physiological and intellectual aspect has on the question to be resolved. If we ever expect to understand the lesions of the brain which bring about a loss of speech, we must first be in possession of a correct philosophy of speech, otherwise, even if we know that this or that injury will result in aphasia, the information will not be of much value. If an individual knows nothing about the philosophical principles involved in the movements of a steam-engine, his knowledge that a particular accident to the machinery has resulted in a stoppage of its working would be of little value, and do but little in qualifying him for its repair. The most important knowledge to be in possession of is not the fact that a certain lesion has produced a particular result, but what principles underlie the conditions which have been destroyed. "Had the subjective method been properly used, and the psychological relations of language duly considered," says one of the authors from whom I have quoted, "it may be questioned whether the theory that a part of the left frontal convolution was the seat of articulate language would ever have been promulgated so hastily and, I may add, received so rashly. To my mind there has been nothing like it since Descartes located the soul in the pineal gland."

Dr. Bucknill says: "How any combination of cells can be attended by processes of thought [and in them we may include the phenomena of association], is to us inconceivable; but it is not more inconceivable than that similar combinations should result in the phenomena of life, or that a combination of atoms should result in the move-

ments of the solar system." Go as far with solution as we may, there still will remain a problem unsolved, for the chain is, of necessity, infinite. When we have gotten so far in elucidation as to demonstrate that a particular phenomenon is essential to any manifestation, a property of it, as in the case of gravitation and matter, we have proceeded as far in our investigations as we can.

There are quite often other phenomena to be observed in aphasia besides amnesia of articulate and written language, but as they may be regarded as more or less incidental, I have confined myself to the treatment of the affection in what may be termed its *pure* form.

ON

THE APPLICATION OF PRESSURE TO THE UTERUS IN CASES OF LINGERING LABOUR.

BY W. S. PLAYFAIR, M.D., F.R.C.P.,

ASSISTANT OBSTETRIC PHYSICIAN TO KING'S COLLEGE HOSPITAL, AND SENIOR PHYSICIAN TO THE EVELINA HOSPITAL FOR SICK CHILDREN.

In 1856 Von Ritgen suggested the employment of external pressure on the uterus as an adjuvant in cases of powerless labour. In 1867 Kristeller carried the suggestion into practice, and published a number of cases in which he had found it of use.

The object was, to *push* the presenting part through the pelvic canal in cases in which the forceps would otherwise be required to *pull* it through; to apply, in fact, a *vis a tergo* instead of a *vis a fronte*.

This proposal has met with but little attention in this country; and the only author who, as far as I know, refers to it, is Dr. Barnes, in his recent admirable work. He says with regard to it: "This resource, then, should not be lost sight of. In certain cases it may obviate the necessity of using the forceps; or it may stand you in good stead when instruments are not at hand."

It is certain that the advantages to be derived from external pressure are not yet widely known or recognised; and as I have now received very material assistance from it in many cases of lingering and powerless labour, I believe it may not be without interest to state briefly the result of my experience on this point, especially as I do not know of any published cases in this country in which its use has been described.

The class of case in which external pressure is likely to prove serviceable is of very frequent occurrence—viz., in which the presentation is natural, and the pelvis roomy, but in which delivery is retarded simply from deficiency or absence of uterine contraction. These are the cases in which resort to the forceps is so often essential, in which the head has passed well into the pelvis, possibly descended as low as the perineum, and in which apparently but one or two good pains are required to complete the delivery.

Firm pressure, applied under such circumstances, may act in two ways: First, and most commonly, it may merely stimulate the sluggish uterus to increased exertion, just as firm pressure after delivery will cause a relaxed uterus to contract. In this way, pains that are feeble and ineffective may be rendered strong and useful, and a natural termination may result when artificial assistance might otherwise be required. I have of late been frequently in the habit of thus stimulating the uterus, and I feel certain that I have in many instances greatly shortened the progress of a labour that threatened to be long and tedious. It is, indeed, often curious to observe how rapidly the pains increase in force and duration, under the stimulation of gentle and steady pressure at the commencement of each pain. The following case may be taken as a good example of the beneficial effect of pressure applied in this way.

——, the mother of several children, about thirty-five years of age. Labour commenced at noon on the 23rd of February, 1868. The pains were at long intervals, feeble, and of short duration. At 3 A.M. on the morning of the 24th the membranes had been ruptured for several hours, and the os was fully dilated. The pains were now more frequent and regular, but they had no effect in causing the head to pass through the brim. It remained partially engaged, but always receded in the intervals between the pains. After waiting for some time, it seemed as if the forceps would be required. Von Ritgen's method was now tried. The patient being laid on her back, and the hands being spread out on the sides and fundus of the uterus, firm downward pressure was made in the axis of the brim at the commencement of each pain. The good effects of this manœuvre were very striking. The first pain was manifestly increased in strength and duration, and the head was felt to advance decidedly as it was pushed down. The contractions now increased greatly in force, and in about six pains the head was expelled. It was in the third position, and the rotation of the occiput forwards was readily made out as it descended. The child was of immense size, and living. The mother made a good and rapid recovery.

This may be taken as a typical example of the most usual effect of pressure—viz., to stimulate the uterus to increased exertion; and I believe it to be a far more effective and safe agent for this purpose than ergot.

Secondly, it is sometimes possible to push out, as it were, the fœtus in the entire absence of uterine pains. I presume that cases suitable for this must be rare, and that, as a rule, extraction by the forceps is to be preferred. Still the following case may be taken as proving the possibility of occasionally effecting delivery in this way.

——, aged twenty-five, a lady of great delicacy of constitution, was pregnant of her third child. She had suffered a good deal during gestation, was immensely distended with liquor amnii, and for some months had been almost entirely confined to her sofa. Her labour commenced on the 10th of August, 1870. During most of the day she had feeble pains, and at long intervals. At 10 P.M. the os was only slightly dilated, and the head was felt to be presenting. The pains got somewhat stronger at 3 A.M., and at 4 A.M. the membranes ruptured, an enormous quantity of water being discharged. At 6 A.M. the os was fully dilated, and the head was engaged in the brim in the first position. The pains were now scarcely worthy of the name. At short intervals there was a barely perceptible hardening of the uterus, which disappeared almost as soon as it was felt, and had no appreciable effect on the presenting part. I was informed that ergot had been administered with advantage in a former labour, and I gave her a full dose without any good result. After waiting till 11 A.M., I began to despair of any progress. The slight contractions previously felt had disappeared, or nearly so, and I made up my mind to apply the forceps.

The husband, however, objected so strongly to any instrumental interference that I determined to try the effect of pressure, although, in the absence of uterine contractions, I scarcely expected any beneficial results.

Spreading the hands over the uterus in the usual way, I made firm downward pressure at intervals of from five to ten minutes. The effect was more favourable than I had anticipated. With each application of the pressure the head was felt to descend, and in about three-quarters of an hour it was distending the perineum. Now for the first time some slight contraction was felt, and the head was soon expelled. The child was born alive, and the mother made an excellent recovery.

A case of this sort is no doubt quite exceptional, and I should generally prefer under such circumstances to apply the forceps. Still it may serve to illustrate Kristeller's statement that external pressure alone is capable of effecting delivery. It is, however, as an adjuvant in cases of lingering labour, and as a means of stimulating a feebly contracting uterus, that pressure promises to be of service. I need hardly add, by way of caution, that gentle but firm pressure in a proper direction is to be used, and that all rough handling of the uterus is to be avoided. The pressure can be most readily applied with the patient lying on her back, but this is by no means essential, and I have constantly used it in the ordinary position on the side, and without disturbing the patient.

Curzon-street, Mayfair, Aug. 1870.

THE scarlet fever epidemic in London continues unabated, the deaths having been 165, 157, and 167, in the last three weeks. In the Battersea sub-district this disease has caused no less than 24 out of 55 deaths during the last fortnight.

ON THE TREATMENT OF TETANUS BY WOORALI, CALABAR BEAN, AND CHLORAL HYDRATE.

BY LAWSON TAIT, M.R.C.S., &c.

THERE is a characteristic of medical literature which is a painful one, and which must greatly retard the development of our art into a science—the small percentage of failures which are published in ratio to the published cases of success, both of operations and of the administration of remedies. It is very natural to suppose that men do not like to make known their failures; but if they were more frequently made public, I am quite sure much more would be learned from them than would compensate for the trifling uneasiness their exhibition would give rise to. One hears every now and then of a case having occurred in such and such a hospital, where some peculiarity in the case—say of ovariotomy—rendered it unsuccessful, through no fault of the surgeon's; and yet we too seldom get accounts of these valuable cases. Perhaps there is no disease about which men rush more ardently into print than tetanus; a single case often constitutes a paper, and from it other practitioners are led to use the vaunted remedy, only to meet with disappointment, and few record it. It has been my misfortune to see a good deal of tetanus, and I have tried many remedies, but always with the same result. If the patient lives over the twelfth day of the disease, he is almost certain to recover, whatever be the treatment. The acute cases terminate in from twenty-four hours to three days, and nothing seems to help them in the least; except perhaps that chloral hydrate gives them an easier death than they have without it. The last three cases of acute tetanus which I have seen I have treated severally by woorali, Calabar bean, and chloral hydrate. The results have been unsatisfactory as usual, and in the first case I believe that death was, if anything, hastened by the treatment. In these cases elaborate notes were taken of temperature, pulse, &c.; but as they reveal nothing not already well known, they are omitted.

CASE 1.—Roger P——, aged fourteen, five days ago had one of his little fingers crushed by machinery, and amputated on the third day after the accident.

March 18th.—Indications of commencing tetanus. From 4.20 P.M. subcutaneous injections of a solution of woorali were repeated at intervals of ten minutes, beginning with one-twentieth of a grain, and ending at 5.15 with a dose of two-fifths of a grain, without any effect having been produced.

19th.—10.15: Symptoms more severe; half a grain injected. No effect having been produced in fifteen minutes, another half-grain was injected, and five minutes had scarcely elapsed before a violent tetanic convulsion affecting the arms and muscles of respiration destroyed the patient. It is impossible to say how far the drug had acted in producing the last and fatal convulsion; but if it is to produce a good result in tetanus, and according to its physiological action, it ought to have a different effect.

CASE 2.—James C——, aged forty, on December 10th had his hand drawn into a hay-cutting machine driven by water power; and before the machine could be stopped, the hand was slowly chopped off, in lengths of about a quarter of an inch, as far as the basis of the metacarpal bone. There had been no bleeding, and the stump was placed in a carbolic bath.

On the evening of the 18th he complained of his throat being stiff, and of slight difficulty in swallowing.

Dec. 19th.—10 A.M.: Distinct trismus. Injected half a grain of the extract of the Calabar bean.—11.15 A.M.: Injected two-thirds of a grain.—1 P.M.: Injected half a grain, as he felt his jaw less stiff. My supply of the bean was now exhausted, and I had to wait till the

20th, at 9.45 A.M., when I injected one grain of the extract. He was suffering much from opisthotonos, and from the profuse diaphoresis so often seen in acute tetanus. At 1 P.M. the muscles of respiration were much affected, and I injected a grain and a half. At 3 P.M. he was no better, and I injected two grains. He died at 5.30 P.M. from sudden spasm of the respiratory muscles.

CASE 3.—Jude B——, aged thirty-two, was attacked by acute tetanus on the 28th of April, six days after amputation of the thigh.—8 A.M.: Gave him thirty grains of chloral hydrate, which had no effect, and was repeated at 9 o'clock, after which he went to sleep almost immediately. He awoke at 12 o'clock, when some nourishment was administered, and the dose of chloral repeated. The nurse was ordered to repeat the dose as often as the effect passed off, after administering what food and wine the patient could take.—4 P.M.: Nurse reported that when he awoke the difficulty of swallowing was very great.—At 9 P.M. I saw him awake, and found opisthotonos well marked. The treatment was continued during the night.

At 8 A.M. on the 29th he was much worse, and evidently sinking. At noon, when he awoke, it was quite impossible to get him to swallow anything, and the opisthotonos was very severe. A nutrient enema, containing forty-five grains of chloral, was therefore administered. I saw him at 4 P.M., when he was partially conscious, and he gradually sank till he died at 5.30.

In these cases it cannot be said that the treatment was of the slightest use, except that in the last case the chloral saved much suffering both to the patient and his friends. This could be formerly done with chloroform, but with much more trouble, and with no more satisfactory result. I fear that even chloral is not to prove of the value in the treatment of this terrible disease which some of the members of the French Academy recently predicted for it. The other two drugs are still more useless.

Wakefield, Aug. 1870.

NOTES OF A

CASE OF HYSTERIA, ILLUSTRATIVE OF ITS MORAL TREATMENT.

BY CHARLES J. CULLINGWORTH, M.R.C.S., &c.

THE following case is placed on record, not on account of there being anything new in the plan of treatment adopted, but simply because it presents such striking evidence of the value of moral influence and persuasion in dealing with the class of hysterical cases of which it may be taken as a fair type—the class, I mean, which is mainly composed of delicate, sensitive girls, who are constitutionally prone to develop the very diseases of mal-assimilation which their cases often simulate, and whose treatment consequently has to be conducted with caution and gentleness as well as great firmness.

Eliza C——, aged twenty-six, residing with her mother in Kirkgate, Leeds, was placed under my care in March, 1864. She had been delicate from birth, though never seriously ill up to the time of her going into service, at the age of sixteen. The work of a servant proved too much for her strength, and in October of the following year she gave it up, and came under the care of the late Mr. Radcliffe, the Poor-law district officer. At that time (October, 1855) she was suffering not only from great debility, but also from constant headache, and from paroxysms of pain at the stomach, frequently accompanied with vomiting, and occurring at all hours, without reference to the times of taking food.

The history of the next nine years is just the history of the ineffectual treatment of a confirmed invalid for supposed ulcer of the stomach. Leeches, blisters, and issues in abundance to the epigastrium, repeated change of air and change of doctor, rigid dieting, and drugs innumerable, were tried, until finally the case was given up in despair, and for the two years previous to my seeing her she had scarcely received any treatment at all.

In March, 1864, she was transferred to my care, as being at that time senior pupil to Mr. Beardshaw, Mr. Radcliffe's successor. Her condition was as follows:—She was pale, thin, and delicate, with a resigned and languid expression. She had been confined to bed for five years, and for three years had been unable to step on the floor. During the day she sat up in bed reading or sewing, and was occasionally taken out of doors in an invalid's chair. She was scrupulously clean and tidy both in her person and her surround-

ings, and received much sympathy and attention from the clergy of the parish church and their lady visitors. The lavish decoration of the walls with illuminated texts bore witness to the frequent visits of the latter.

There were no physical signs of disease in the organs of the chest and abdomen. She complained of pains in the epigastrium and left hypochondrium, variable in character, and fitful in their duration and time of appearance. There was constant nausea, with frequent vomiting. On some days she rejected everything, and on other days she did not vomit at all. At each catamenial period all these symptoms were aggravated. The bowels were confined; appetite poor; menstruation regular and somewhat profuse.

At first I took for granted the diagnosis of her many previous advisers, and proceeded to treat the case accordingly, with the effect of shaking my faith in the efficacy of every remedy I tried. On June 17th, when she had been under my care for three months, she first complained to me of peculiar creeping and pricking sensations along both arms, and aching of her finger-joints, with a sensation of choking sufficient sometimes to prevent her from swallowing her pills; and then it was that I was led to see clearly the true nature of the whole case. I now confidently assured her that she would certainly recover if she would but second my efforts.

The first thing to be overcome was the vomiting. I ordered her the following draught every four hours, and told her it would have so speedy an effect upon the vomiting that in a few days the medicine would be invariably retained:—Dilute hydrocyanic acid, two minims; tincture of valerian, thirty minims; aromatic spirit of ammonia, fifteen minims; water to half an ounce. In a week she was able to take her medicine without its causing sickness, and the pain in the left side was much less.

I daily cheered her with fresh assurances that certain articles of diet would now be found to cause neither nausea nor vomiting, that old-standing pains would gradually leave her, and that new ones would be short-lived. The stomach symptoms abated, and on July 15th I desired her to be dressed and to sit up for a short time, remaining up rather longer each succeeding day; and I ordered her the following pill three times a day: Sulphate of iron and disulphate of quinine, of each one grain; extract of lettuce, two grains. She received at first a little help in dressing, but presently I told her that she was now strong enough to dress herself, and she managed to do so. I then gave my attention to her walking powers. I desired her to stand upon the floor, encouraging her at first by allowing her to take hold of my hands, next time of my fingers, and then of one finger only, until she summoned courage to stand without help at all. The next step was to urge her to try to walk across the room, which was accomplished gradually, like the former lesson. Day by day I went to put my patient through her exercise, and day by day I was rewarded by being able to note a gain in her strength of will.

August 10th (nearly two months after commencing the treatment).—Vomiting occurs but very seldom, and without premonitory pain. She is strong, dresses herself daily, and sits up all day. She is now able to walk across the floor, lightly holding one's hand.

Sept. 13th.—She has gained flesh, and looks quite cheerful and hopeful. She can walk slowly across the room by the aid of a walking-stick. I ordered the prussic acid mixture to be discontinued, and a table-spoonful of Griffith's mixture to be substituted for the pills.

Gradually the walking-stick was thrown aside, by allowing her at first to carry it in her arms ready for an emergency, and so convincing her that it could at length be dispensed with.

Nov. 1st.—My note-book says: "She can now walk erect, and without any assistance, slowly across the room; and has walked up and down stairs with no other aid than the balusters. She has gained flesh, and lost all pain and sickness."

Dec. 7th (nearly six months after commencing treatment).—The record states that "she takes a little walk out of doors every day without help, and to-day has walked a distance of at least a mile."

Soon after this time I left Leeds, and my next note occurs after an interval of more than three years.

May 1st, 1868.—"I have seen Eliza C—— to-day, and find her earning her own livelihood. She finishes woollen shirts at her own home. She is well and in good spirits, and very grateful for what has been done for her."

July 9th, 1870.—I sought out my old patient, who is now living at the Armley School-house, near Leeds, having been provided with rooms there through the kindness of the vicar. She still maintains herself by sewing. She is extremely active and light-hearted, and looks stouter and healthier than I have ever seen her.

Such is a brief account of a case which, I think, may be safely left to point its own moral. I may just remark that I only regarded the administration of medicine as a useful auxiliary, and as a help to the patient's faith. Her complete and permanent recovery was due, above all, to the gradual imparting of my own confidence to her, so that the weakened will was, little by little, brought under her control again. Of course, such a plan requires of the attendant an immense expenditure of time and patience. But this cannot for a moment be weighed against such a result. Is it not indeed worth a far more serious sacrifice to rescue a patient from a cheerless and purposeless existence to the enjoyment of a life of healthful activity and independence?

Manchester, Sept. 1870.

NOTES OF A FATAL CASE OF METASTASIS TO THE DURA MATER OF THE BRAIN DURING ACUTE RHEUMATISM.

BY HENRY PRIESTLEY, L.R.C.S. EDIN. &c.

CEREBRAL METASTASIS, though a universally recognised termination of rheumatic fever, is yet, I think, sufficiently rare to warrant me in recording a case which has just come under my observation in private practice.

On the 18th August I visited for the first time Mrs. W——, a pale, anæmic, delicate-looking woman, aged twenty-seven, who complained of severe pain in one knee, with exacerbations at night. On examination, it was found to be somewhat hotter than natural, and slightly swollen. Inquiry elicited no history of exposure to damp or cold, or of any previous attack. The pulse was soft, and about 90; no great thirst, and no acid perspirations. The case looked like one of idiopathic synovitis, being confined to one knee; but rheumatism was suspected, and the patient put upon five-grain doses of iodide of potassium three times a day, with a one-grain opium pill at bedtime, and the joint ordered to be enveloped in cotton wool and oiled silk.

According to expectation, the disease developed itself unmistakably in a few days, attacking the other knee and then the ankle-joints. The heart did not become implicated, and the fever was of a mild type. The patient was seen daily up to the 23rd August, and, no unusual symptoms presenting themselves, a favourable prognosis was given on that day in answer to inquiries from the patient's friends.

At 6 o'clock on the following morning I was summoned in great haste, and on my arrival, to my surprise, found my patient comatose and *in articulo mortis*. Her husband told me that up to 3 A.M. his wife had been very restless; that the pain had then suddenly left her joints, which she stretched out in corroboration of her statement, and expressed her belief that she should soon be better; she then dropped off to sleep, and though he noticed that she snored loudly he did not think anything of it until, at daybreak, he saw her ghastly death-like features and fixed eyes, when he hurried off at once for me.

No autopsy was permitted, therefore we can only surmise what was the state of affairs within the cranium. I hope that the history of the above will be of interest and service to young practitioners, and caution them to be wary of the prognosis they give in apparently uncomplicated cases of acute rheumatism.

Glossop-road, Sheffield, Sept. 1870.

A WOMAN named Cooper, housekeeper to Mr. W. Boyce, at Newmarket, was sitting near a table on which were some poisoned papers for the purpose of killing flies. A fly was seen to go to one of these papers and then to alight on the woman's nose, which was slightly scratched. The wound speedily became inflamed, in a short time her whole system became affected, and in about twenty-four hours she died.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

KING'S COLLEGE HOSPITAL.

REMOVAL OF A FATTY TUMOUR.—DIVISION OF FISTULA IN ANO.—PLASTIC OPERATION FOR THE CURE OF EPISPADIAS.—CLINICAL REMARKS.

(Under the care of Mr. WOOD.)

ON Sept. 17th, Mr. Wood removed a fatty tumour from the shoulder of a woman a little above middle age, divided a fistula in ano, and performed one of a series of plastic operations for the cure of epispadias in a lad about thirteen years of age.

In the removal of the tumour Mr. Wood said that he had observed certain precautions, some of which had prolonged the operation to an extent which might at first sight seem unnecessary. These had been: First, to devote special care to the dissection of the tumour from the skin, to which it was very firmly attached, though only loosely connected with the trapezius; otherwise button-holes might have been made in the skin. Secondly, the tumour having several tails burrowing in different directions, it had been necessary to ensure that no portion remained behind to form the starting-point of a new growth; neglect of this precaution led some people to believe in recurrent lipomata. Another danger to be averted was suppuration of the exposed surfaces; with this object torsion had been employed instead of ligatures, wherever the former method was applicable, in order to avoid as far as possible the irritation liable to be produced by threads; and the part had been dressed with chloride-of-zinc lotion—a preparation in which Mr. Wood said he had great confidence, especially after the removal of tumours, as preventing putrescence; also he had endeavoured, by making the most dependent part of the incision the shallowest, to prevent any bagging of the discharge.

The fistula in ano was a complete one, and had originated in a small abscess which had opened into the rectum. A considerable portion of the track ran in a direction at right angles to that which led to the external opening, and was so small that the director could only be passed along a probe as a guide. Another equally fine sinus was found to terminate under the skin. They were each of them laid open and dressed with oiled lint. Mr. Wood said that had the fine upper track leading into the rectum been missed, the operation would have proved quite useless, and left the patient subject to a speedy return of all his old suffering and inconvenience. It was necessary to explore these cases with great care, as the laying open of any track, however minute, passing under the fibres of the sphincter was absolutely essential; it was also desirable, though not essential, to incise any external sinuses that might exist.

The subject of epispadias had been operated on several times before. A flap had been taken up from each groin, and, at a subsequent operation, the loose tissue of the scrotum had been carried upwards, the testes taking up a very good position at the anterior margin of the perineum, one on either side of the raphé; by these means a prepuce had been provided for the glans, and a canal constructed for the passage of urine. There now remained only a small opening two or three inches above the glans, which permitted an escape of urine whenever the patient was in a recumbent posture, and had resisted two attempts to close it. Mr. Wood took up a lancet-shaped flap about three inches and a half long and two broad, the terminal portion of which came from the inner part of the left thigh, adjoining the attachment of the adductor muscles. Above, where the flap was twisted on its base, a gusset was cut out to remove a large wrinkle, and, the edges of the opening having been pared with the least possible loss of tissue, the cicatricial tissue forming its margin was, by careful dissection, split horizontally to a distance of from a half to three-quarters of an inch, to reach healthy tissue, and the margin of the circular end of the flap was dovetailed between the two layers so formed, and held in position by means of numerous silver sutures. This portion was then painted with collodion. By flexing the thigh on the body, and rolling it inwards so as to relax the integument, and bringing the edges of skin together with silver sutures over the line of the groin, the raw surface left by the reflexion of the flap was nearly covered over, and the thigh then fixed in its flexed position by means of strapping and bandages. Mr. Wood said that he had shaped the flaps so as to avoid as much as possible the cicatrices of previous operations, and by carrying up a perfectly healthy piece of skin attached to a base broad enough to contain an abundance of nutrient vessels, he hoped to ensure success; the union on which he depended would take place between the contiguous raw surfaces of the inferior aspect of the skin and the lower layer of the split covering of the bladder. The patient would be placed in bed in a sitting posture, with the knees drawn up to the chin, for the twofold purpose of avoiding tension on the sutures and of ensuring the flow of urine from the urethral passage. Ten days later, the flap had become entirely adherent, and the operation appeared likely to be a success.

AMPUTATION OF THE GREAT TOE FOR PERFORATING ULCER OF THE FOOT; CLINICAL REMARKS.

(Under the care of Mr. HENRY SMITH.)

The patient was a man past middle age. The great toe of the left foot was drawn up to a right angle with the dorsum, and in the plantar aspect of the ball of the toe was a pus-discharging, fistulous opening. Mr. Smith said that the case was one of perforating ulcer of the foot; and was interesting because an example of a disease not much noticed in books, and requiring amputation—a mode of treatment at first sight unduly severe, though, in fact, none other could be of any avail. As in the present instance, where there had existed for five years a purulent discharge, increasing deformity, and considerable pain, the affection generally commenced with a corn or bunion, in which suppuration took place, and, undermining the tendons, proceeded to disorganise the joint beyond all hope of repair. In consequence of the great distortion, Mr. Smith was obliged to make incisions different from those laid down in books, and it was found difficult to obtain a satisfactory flap in consequence of the extensive disease and thickening of the soft tissues around; but by carefully planning the incisions, and removing a sufficient amount of bone, a good flap was formed. The case, on inquiry ten days after the operation, was found to be progressing well.

UNIVERSITY COLLEGE HOSPITAL.

IN THE WARDS WITH MR. CHRISTOPHER HEATH.

ON the 23rd instant we visited this hospital with Mr. Christopher Heath, who, during the absence of Mr. Erichsen and Sir Henry Thompson, has the charge of their wards, and saw, among others, the following interesting cases:—

Two cases of skin transplantation of a fortnight's standing. One was that of a woman who had undergone amputation of a carcinomatous breast, involving considerable loss of skin; the other a man suffering from severe eczema of the leg, which about the middle third had resulted in a large and obstinate ulcer. In both instances the result was very satisfactory, but especially in the latter, where the transplanted centres had been placed in a rather unpromising soil, and had expanded into circles of about the size of a sixpenny piece.

A case of extensive ulceration of the integuments of the leg in a child. The ulceration had the appearance and character of a tertiary affection, and Mr. Heath believed it to be the result of a hereditary taint. He put the patient under iodide of iron with local mercurial treatment, and held out great hopes of a favourable result.

An obstinate case of urethral stricture, which had been for a considerable time under treatment in one of the West India islands, and was at last sent to England to be placed under Mr. Heath's care. A No. 3 catheter had been introduced under chloroform at a previous visit, and now Mr. Heath introduced a Holt's dilator, and subsequently drew off the water with a No. 10 catheter, which was introduced without much difficulty. The patient was ordered to be kept warm, and to take an immediate dose of twenty drops of laudanum.

In the same ward, Mr. Heath pointed out a splint, recently introduced from Germany. It is easily made, and forms an efficient substitute for the expensive and troublesome leather splint. It is made as follows: a piece of flannel folded into a double layer is laid underneath the leg; by gathering it up on either side, so as to make its edges meet over the crest of the tibia, and the dorsum of the foot, and cutting off what is superfluous, it is adapted to the shape of the parts. The same is accomplished for the foot-piece by cutting out the fold which results from bringing together over the middle line of the sole the opposite sides of the end of the flannel. Then, as a guide to the next step, a line is drawn in continuation of the middle line of the sole, along the under surface of the leg, and through the part corresponding to the centre of the popliteal space. Next, the flannel being removed, the two layers are united by two lines of stitching, about a quarter of an inch apart, and one on either side of the guiding line. The flannel is then accurately replaced, and the layer adjacent to the skin pinned in position, while the outer one is allowed to drop and hang from the double row of stitches on the under-surface. The outer surface of the inner layer having been spread with plaster of Paris to a depth of about two lines, the other layer is brought up on either side of the leg and foot, and accurately adjusted to the first, to which it soon becomes adherent, while the entire structure sets into a firm and solid splint. It admits of no eversion at the edges, and the coherence conferred by the texture of the flannel counteracts the brittleness and the tendency to crack spontaneously, which are liable to give trouble with plaster of Paris as usually applied. The splint can be maintained in position by bandages and strapping. The thin line of flannel, which has been kept free from plaster by the double row of stitches, and preserves its pliancy, forms a hinge, which enables the splint to be removed and readjusted as often as occasion may require.

In another ward Mr. Heath passed the lithotrite twice into the bladder of an old man—a patient of Sir Henry Thompson,—each time crushing several fragments, and bringing away between the blades of the instrument a quantity of finely-crushed stone. He also drew special attention to a man who was the subject of an enormous malignant growth, involving the neck, cheek, and lower jaw on the right side, and presenting a considerable ulcerating surface. A few minutes later a flow of blood came from the patient's mouth, which was traced to a fungoid projection from the right tonsil, apparently due to the invasion of the part by the malignant growth. The hæmorrhage was ultimately arrested by swabbing the part with perchloride of iron, by means of a sponge fastened to a small stick for a handle, but not until more than a pint of blood had been lost. Mr. Heath explained that the disease had reached a stage at which surgical interference of any kind, including ligature of the carotid artery, would be quite unavailing to stay its progress or alleviate the patient's sufferings.

The last case we notice was one of great interest. The patient, a youth about twenty years of age, had been admitted a few days previously complaining of pain and tenderness in the right hypogastrium and diarrhœa. He was said to be suffering from perityphlitis. We found him pale and somewhat wasted; the abdomen was rather tense, though not notably distended, and at about a third of the distance from the anterior superior spine of the ilium to the linea alba presented a red, fluctuating, and slightly prominent "point," which unmistakably indicated the presence of subjacent pus, for the discharge of which Mr. Heath decided on making a small incision. As the patient exhibited considerable nervous apprehension, nitrous oxide gas was previously administered. The instant the incision was made, a forcible stream of offensive pus spurted out. When about a pint had been discharged, the opening became plugged by what, on drawing it out, proved to be a slough, apparently of cellular tissue, about five inches in length; but no sooner was this withdrawn than there followed a copious stream of venous blood. Digital pressure was immediately applied to the tissues adjacent to the incision, with the result of arresting the flow; and the patient was placed under chloroform. Mr. Heath, failing to discover the source of the hæmorrhage in the lips of the wound or any other attainable part, enlarged the incision, and, having rapidly withdrawn several large handfuls of clot from between the abdominal wall and the parietal peritoneum, applied sponges, with the only result that the blood welled up from some undiscoverable spot and rapidly refilled the cavity. At last, every attempt to discover the seat of the hæmorrhage having failed, and as the patient was beginning to show signs of exhaustion, a large quantity of broad shreds of lint, soaked in solution of perchloride of iron, was stowed into the cavity; this immediately arrested the flow of blood. Mr. Heath said that probably the withdrawal of the support afforded by the large accumulation of pus had determined the giving way of a vein whose coats had been disorganised by the adjoining suppurative process. Three days later the patient was still alive, and had passed some fæces through the wound. We shall have occasion to refer again to this case.

Provincial Hospital Reports.

SUFFOLK GENERAL HOSPITAL.

DOUBLE POPLITEAL ANEURISM CURED BY COMPRESSION.

(Under the care of Dr. ROBERT MACNAB.)

JAMES C——, a muscular, fair-complexioned labourer, thirty-two years of age, was admitted into the hospital on the 19th of April, 1870. He had been in the Artillery thirteen years and three months, and was discharged two years ago on account of an injury to the elbow. About twelve months since, without receiving any injury whatever, he became sensible of pain at the back of each knee, and shortly afterwards observed a swelling in the right popliteal space. Three months later he found that a swelling of the same character had made its appearance in the left popliteal space also; and since then they had both continued to increase in size, and the pain had become more and more severe.

On admission there was a large tumour, about the size of a goose's egg, in each popliteal space; that in the right being slightly larger than the left, and having the skin over its outer aspect of a dusky livid colour. From the characteristic pulsation, œdema of the legs, and other symptoms, there was no difficulty in diagnosing aneurism of both popliteal arteries. The man was otherwise perfectly healthy, and there was no evidence of any other arterial disease. Heart sounds good.

April 28th.—3.40 P.M.: Having resolved to treat the case by compression, the right limb was elevated on a pillow, and a flannel bandage carefully applied from the toes upwards. The thigh and groin were shaved, and dusted with violet-powder, and two tourniquets applied to the femoral artery, one at the groin, and the other at the apex of Scarpa's triangle. Continuous compression to be kept up by tightening the tourniquets alternately for a quarter of an hour at a time. Pulsation in tumour to be arrested by the minimum amount of pressure. A nurse to sit up with patient during the night to manage the tourniquets.

The compression in the groin was made by Lister's abdominal clamp, a pillow being placed between posterior pad and the patient's back. Thus, from the elastic character of the pillow behind, and the size and mobility of the anterior pad, it being fixed to the perpendicular screw by a ball-and-socket joint, pressure of considerable force was made without causing any of the usual irritation and uneasiness. The other tourniquet used was the ordinary "horseshoe" of Signorini.

29th.—9.30 A.M.: Compression has been continuous during the night. Tumour feels slightly harder; no per-

ceptible diminution in size. Pulse 72. Has not had much sleep. Ordered four drachms of syrup of hydrate of chloral and one ounce of cinnamon-water at bedtime. Fluid nourishment.

30th.—The pulsation in aneurism this morning is diminished, and can be restrained by less pressure than yesterday. Has slept during the night. Patient can now regulate the compression himself. Repeat the chloral draught at bedtime.

May 1st.—Still less pressure required to restrain impulse. Tumour decidedly less, but density not much affected. Slept well during the night. Can bear each compress fully half an hour without being loosened. Takes nourishment well. Pulse normal. Continue chloral draught.

2nd.—This morning all pulsation in tumour has ceased, and it feels harder; more pain of a burning character complained of in limb generally. Compression to be continued. Omit chloral.

3rd.—Tourniquets entirely removed; no pulsation in tumour.

4th.—Pulsation still absent. A small superficial artery can be felt pulsating over outer aspect of the tumour.

7th.—There has been no return of pulsation in aneurism, which feels more consolidated, but not much diminished in size, and all œdema has disappeared from foot and leg. There being no reason for delay, compression was applied to the left femoral at 10.45 A.M., in the same manner as it had been to the right. Considerable œdema of leg; veins very prominent. Chloral draught at bedtime.

8th.—11 A.M.: On loosening the tourniquets all pulsation in the tumour is found to have ceased—twenty-four hours after compression had been commenced. Vessel of considerable size felt pulsating under the skin on the outer side of the tumour. Œdema of leg slightly increased. Feeble pulsation in posterior tibial behind malleolus. Pain in limb considerable. As a precaution, compression to be kept up for forty-eight hours longer. Repeat chloral draught.

10th.—All compression removed, and the man feels little or no pain in either leg.

June 28th.—Since last date there has been no return of pulsation in either aneurism. The superficial anastomotic vessels have increased considerably in size, and one over the outer aspect of each tumour, about an inch behind the head of the fibula, can be seen pulsating under the skin. Pulsation in both posterior tibials has returned. There is no great appreciable diminution in the size, nor increase in the density, of the tumours; but the facility with which the patient can perfectly extend his limbs, and the alacrity with which he moves about the ward, would indicate that there has been a considerable amount of contraction. Œdema of both legs quite gone, nor does it return after the patient has been in the erect position for some hours. Dismissed, with strict orders to report himself at the hospital monthly.

Remarks.—The above case may, perhaps, be found interesting from the comparative rarity of double popliteal aneurism, and from the marked success and rapidity of cure by compression, the patient having been thereby saved the more tedious and dangerous operation of ligature. Pulsation in the first aneurism treated had entirely ceased at the end of ninety-one hours, being a good example of cure by the gradual deposition of laminated fibrine; and, on removing the tourniquets from the left femoral (twenty-four hours after compression had been applied), the tumour in that limb was found consolidated, with entire absence of pulsation, sudden and complete coagulation of contained blood having evidently taken place. The treatment of the case throughout was remarkable for the entire absence of the irritation and pain usually caused by pressure on the femoral; thus showing the superiority of instrumental, carefully applied and assiduously watched, over digital compression, or flexion, where chloroform has so frequently to be had recourse to to allay pain. Lister's abdominal aortic clamp, as applied, answered admirably; and, in the absence of Carte's apparatus, will be found a most useful substitute for compressing the femoral at the groin.

The hydrate of chloral succeeded in giving sound sleep—as, indeed, it will be almost invariably found to do where not much pain is present, and nervous irritation and excitement are the only cause of wakefulness.

In the absence of any other form of arterial disease, it is probable that the patient's occupation as an artilleryman—where, while straining forwards and standing up in his stirrups, he was frequently called upon to make sudden and severe muscular efforts—may have had something to do with the production of his disease.

Reviews and Notices of Books.

Traité des Maladies des Yeux. Par J. GALEZOWSKI. Première Partie. 8vo, pp. 464. Paris: Baillière et Fils. 1870.—When in any language there exists upon a given subject a treatise which is eminently comprehensive and complete, one fails at first sight to see the *raison d'être* of a rival publication. Regarded in this way, and remembering the masterly work on general ophthalmology of Dr. Weber, as well as his great treatise on the ophthalmoscope that is now passing through the press, we cannot but feel some mild curiosity with regard to the reasons that have induced Dr. Galezowski to appear in print once more. These reasons, however, do not materially concern us; and if his book be a good one, we cannot be otherwise than his debtors for its production. We have, therefore, looked through its pages with considerable care, and have been repaid by finding some very useful and sound advice upon the class of questions which Dr. Galezowski is well known to have studied very diligently—namely, the diseases of the conjunctiva and external ocular appendages. Upon other subjects the book is generally correct, and repeats in an orderly manner the stock knowledge of the profession.

On Microscopical Manipulation. By W. T. SUFFOLK, F.R.M.S. London: Henry Gillman. 1870. — This little volume had its origin in a series of lectures delivered at the Quekett Microscopical Club early in the year 1868, having for their object to assist beginners in microscopical science, with simple and practical directions especially in reference to processes more usually learned by seeing the instrument in the hands of an experienced person.

Thérapeutique des Maladies Chirurgicales des Enfants. Par T. HOLMES. Ouvrage traduit sur la séconde édition, et annoté, sous les yeux de l'Auteur, par le Dr. O. LARCHER. Avec 330 figures intercalées dans le texte. Paris: J. B. Baillière. pp. 917. 1870.—Mr. T. Holmes's work on the surgical diseases of children is already well known in this country and in America, and the author has been fortunate in having so able a translator as Dr. Larcher as its introducer to the profession in France. It is not, however, simply as a translator that Dr. Larcher has done his work well, for he has laboriously added both to the letterpress and to the illustrations such cases from the practice of Continental surgeons as served to illustrate the subjects treated of. This is especially noticeable in the chapters on Congenital Malformations and Deformities, to which many curious cases and contributions are added, so that those chapters form now, in our opinion, the best *résumé* of the entire subject we are acquainted with in any language. The latter part of the work has not received so many additions, but has been equally carefully edited; and all the original woodcuts of Mr. Holmes's are introduced, though the not very satisfactory chromolithographs of the English edition are omitted. We are glad to find Mr. Holmes's work in so goodly a garb, and hope its success in France (when science and art are once more in the ascendant) will be equal to that it has attained in this country.

Advanced Textbook of Zoology, for the Use of Schools. By H. A. NICHOLSON, M.D., D.Sc., F.R.S.E., &c., Lecturer on Natural History in the Medical School of Edinburgh, Vice-President of the Geological Society of Edinburgh, &c. Blackwood and Sons, Edinburgh and London. 1870.—The author of this textbook believes that the time is at hand

when natural sciences will take their true place in school education, and he disbelieves in the existence of any royal road to learning in natural history any more than in any other department of human knowledge. If natural history, he says, is to be taught in schools, with any satisfaction to the teacher or any profit to the learner, it must be taught as systematically as Mathematics and Greek have been taught for many generations. The author's text-book, regarded from this point of view, is a decided success; it is just what was wanted. The subject has been treated in a scientific spirit, but at the same time so clearly and well as to be quite within the comprehension of any young student who will bring ordinary attention to his task. We think the author is right to have devoted a comparatively large portion of his book to the invertebrate animals, for much more practical zoological work is usually undertaken in connexion with these than with vertebrate animals. The book is well illustrated by drawings on wood by the author, and a glossary at the end of the volume contains an explanation of all those technical expressions the occasional use of which is unavoidable in a work of this character.

Foreign Gleanings.

FATAL POISONING BY THE LEAVES OF THE TAXUS BACCATA (YEW).

L'Imparziale, of Florence, mentions the case of a girl, aged nineteen, who was advised by an old woman to take a decoction of these leaves to bring on the catamenia. She first took for three days, every morning, a tumblerful of a decoction of between five and six ounces of the leaves. (This quantity of leaves was probably boiled in the three tumblers: the text is not clear.) On the fourth morning the dose was increased to eight ounces. Severe vomiting ensued; a medical man was called in; but as the patient lived in the country, no powerful remedies could be obtained. The vomiting was encouraged by the use of tepid water; mustard was applied to the legs, but the patient died, delirious, eight hours after taking the last dose of the decoction. Nothing of importance was revealed by a post-mortem examination; but it remained clear that the leaves in question possess violent narcotic properties. On reference to Lindley, we read:—"The leaves of the yew are fetid and very poisonous."

LARGE DOSES OF OPIUM IN TETANUS.

Chloral is being extensively tried in this malady. Some statistics respecting its efficacy will be now most welcome. In the meanwhile it should not be forgotten that heroic doses of opium have, in some hands, been successful. *L'Union Médicale* gives the experience of Dr. Chazarin, who practised for seven years in the French colony of Senegal. He mentions altogether twenty-eight cases, twenty of which, treated by various means, terminated in death. The eight others were submitted to the following treatment: First day, 15 grains of gummy extract of opium in solution; second day, 22 grains; third day, 30 grains; fourth day, 37 grains; fifth day, 45 grains; and so on, increasing the dose each day seven grains if the symptoms did not improve. When 90 grains were reached, the doses were diminished in the same ratio from day to day. Of these eight patients one only died, and this in consequence of frictions of oil of turpentine imprudently undertaken on the advice of a neighbour. These cases deserve particular attention, though they are not very uncommon, as some analogous ones were published in *L'Imparziale* of Florence in the year 1868. Quinine was, however, in these latter instances added to the opium.

SMALL-POX WITHOUT ERUPTION.

An epidemic of small-pox broke out this summer at a place called Limite, near Empoli (Italy). In publishing an account of this epidemic, Dr. Landucci states that several persons presented all the symptoms of the complaint, but had no eruption. Dr. Anciaux, in *L'Art Médical*, corroborates the cases, and says that he witnessed the same peculiarity whilst the small-pox was prevalent in his locality.

TWO CASES OF DEATH AFTER RITUAL CIRCUMCISION.

Dr. Schwarz has published in the *Wiener Med. Presse* the cases of two boys, eight days old, who died—one five days after circumcision, and the other twenty-five days after the same operation, both of phlegmonous inflammation and sloughing of the part. Dr. Schwarz deprecates the custom with great warmth, and expresses the wish that it may be laid aside.

DISEASES AMONG ANIMALS.

THE progress made by cattle plague both in Eastern and Central Europe during the last few weeks is calculated to cause the greatest alarm lest the disease should again revisit our shores. None can forget the anxiety which prevailed during its last visitation, when the losses borne both by individuals and by the State rose to an amount which even now can scarcely be shown by figures. As on former occasions, this terrible pest has followed in the wake of war, and we daily read of fresh ravages by cattle plague in the rear of the contending armies. Each post gives us fresh news which should heighten our fears, and so warn us to increase our precautions. In Eastern Europe, Poland, Galicia, and Transylvania are infected to a considerable extent, whilst the disease has also shown itself in eleven communes in Roumania, as well as in others of the Turkish provinces. It is also spreading along the Asiatic maritime districts in the direction of Trebizond. Again, in Central Europe, it has shown itself in Saxony and Bavaria. In France, Gravelotte and Bar-le-Duc are reported to be centres of infection. There appears to be no doubt that the disease was imported from its permanent home in Russia by the contractors for the German army, and at first was recognised in cattle purveyed for the troops, and brought from the province of Podolia in Russia. As the armies take up their position round Paris it will doubtless be found to accompany them, and Normandy and Brittany, hitherto preserved from this terrible scourge, will probably ere long feel the bitterness of its ravages. The question therefore becomes, practically, an interesting one to ourselves. How can we be kept from this fearful visitation? how can England obtain its necessary meat supplies without risk of another visitation of cattle plague?

It cannot now be said, as was charged against them in 1865, that our Government are ignorant of the danger, or have taken no precautions to meet it. When the new Animals Act was passed in 1869, certain countries, from which infection might be feared, were placed in the list of scheduled countries—i.e., cattle coming from Russia, Austro-Hungary, the States of the North German Confederation, Turkey, Italy, the Papal States, Belgium, the Netherlands, and Greece, were forbidden admittance to the interior of England, but were to be slaughtered, under the supervision of the Customs' authorities, at a place set apart for that purpose at the port of landing; an exception being made as to the port of London (inasmuch as cattle may not leave the metropolis alive), so that cattle there arriving might, under certain restrictions, be taken to the metropolitan market. Of the countries where cattle-plague is now known to be existing, France alone was excepted from the schedule; but the Privy Council promptly recognised the new danger, and, on the 9th of this month, included France in the list of suspected countries. Later, when it was feared that sheep—liable to this disease, and capable also of conveying its infection in their fleece—would be brought from Germany, where cattle-plague was rife, and forwarded to our shores from the ports of Holland and Belgium, a further Order in Council was passed, ordering that all cattle and sheep coming from Germany and France should be slaughtered at the port of landing. As Holland

and Belgium had, by this time, closed their respective frontiers against all animals from Germany, the risk would now appear to be small; for, having in view the increased danger of exposing in the metropolitan market animals from Germany or France landed in the port of London, the Government have forbidden that relaxation, so that now all animals coming from Germany and France are effectually prevented from coming in contact with our home animals in the metropolis, as elsewhere. That all the restrictions above alluded to will affect the price of meat during the winter now approaching cannot be doubted; but the increase of expense to meat consumers will not be so great as if the Government had accepted the proposal of some of our alarmists in the interests of home-bred animals, and had altogether forbidden the importation of animals from infected countries. With the evidence before us of the watchful care of the Government, with the dearly-bought experience which practical and scientific men have attained, with the aid of inspection and perfect isolation of each cargo as it is landed on our shores, we have a *right* to hope that the rinderpest, may be prevented from again ravaging our herds and flocks, and ruining our farmers. The importers, too, who naturally, in their own interests, watch with a jealous eye any restrictions which may be put upon their trade, any check which may be put upon their gains, have at least the satisfaction of knowing that their trade is not entirely put a stop to, their gains not altogether interfered with; and that, whilst the Government, on the one hand, will not permit them recklessly to risk the danger of importing disease into our country, they do not, on the other hand, from over-zeal or over-timidity, inflict regulations which will bring the trade to ruin, and expose the consumers to one at least of the hardships of a siege. In a word, we may hope that our meat supply will not altogether fail us from abroad, and that cattle-plague will not visit us at home.

Foot-and-mouth disease is also spread widely over Great Britain, having been found to exist in no less than fifty-three counties, chiefly in England, for in Wales and Scotland the attacks have hitherto proved mild in type and few in number. In England, however, the disease has in many instances assumed a most virulent form, the number of deaths in some centres of infection having averaged over 29 per cent., whilst the precautions hitherto taken by the county authorities would appear to have had no effect in checking the progress of this lamentable complaint. In Somersetshire and Dorsetshire in the south of England, and Yorkshire, Cumberland, and Lancashire in the north, foot-and-mouth disease seems to have spread in its most aggravated form. Some of these counties appear to have been sensible of the great scourge from which they are suffering, and in more than one instance have applied to the Government that the fairs and markets should be stopped; but so serious an interference with English trade could hardly be proposed without encountering manifold opposition, and it could hardly be expected that Government would take upon itself the responsibility of such interference in one county, whilst the authorities of the adjoining one left the circulation of animals without any restriction. It seems, however, that the time has now arrived when some general legislation on the subject of foot-and-mouth disease is not only desirable but necessary; for, with the supply of meat from the Continent running short, and rinderpest threatening us in every importation from Germany or France, we cannot afford to allow our home resources to be crippled, whilst local interests and local prejudices squabble over our sickening herds and flocks. That this disease is on the increase there can be no reasonable doubt; that the steps taken by the local authorities to check this increase have failed is equally patent; and it would be far better that the Government should at once take the matter firmly in hand than allow a local and patchwork legislation to be carried on, which is too frequently made use of to subserve personal or party interests. Pleuro-pneumonia, also, is on the increase, and is to be found in more than half the counties of Great Britain. This disease is more to be dreaded than foot-and-mouth, inasmuch as the latter is, with care, more easily cured, and is generally speaking, with discreet farmers, more inconvenient than dangerous, whilst in pleuro-pneumonia the results are more frequently fatal, and the flesh of the animals affected is totally unfit for food. Add to our present state as regards our home cattle and sheep, that small-pox has ere now committed its ravages, and is ever to be dreaded among our flocks—it seems to have its home in the neighbourhood of Stettin,—whilst late advices from Friesland announce its appearance in that sheep-producing and sheep-exporting country, and it cannot be said to be premature that we should begin to fear for the future as regards our meat supply, and to hope that Government will step in with a strict determination that no fear of unpopularity, or of anathemas vented by a landed proprietary, shall deter them from immediately taking measures to check the tide of disease which seems now to be rolling over our animal kingdom.

CONTAGIOUS DISEASES ACT IN CALCUTTA.

DR. ARTHUR PAYNE, the superintendent of the Lock Hospital at Calcutta, has issued his first report on the working of the Contagious Diseases Act in that town. Our readers are aware that, since April, 1869, an attempt has been made to extend the Act to the civil population of the town and suburbs; and the success with which it has been followed cannot fail to be of interest, after the prolonged discussion to which the proposal of a similar enactment has given rise among ourselves. From the experience of well-nigh a year, Dr. Payne demonstrates, in a carefully sifted series of tables, that the Act, so far as it has been applied, "is effective in keeping down venereal disease in the women fairly subject to it; that the rate of removal of disease outstrips the rate of its reproduction, and that inspection is sufficiently frequent." It is interesting to perceive that his facts and figures irresistibly point to the following conclusions:—First, that the daily withdrawal of 324 diseased women from their trade cannot but have influenced for good the health of the town; secondly, that the Act will eventually fulfil the object it has already in great part achieved by reducing the frequency and severity of the disease; thirdly, that the health of the male population has perceptibly improved in places where there is a fair command of the prostitution; fourthly, that amendment in the constitution of the Act is indispensable, as well as extension of its application; fifthly, that the evidence of prostitution requires authoritative definition, and that neither marriage nor other protection should be allowed to shield a woman from the liabilities of a prostitute's life, when such life is proved against her; sixthly, that to obviate the repugnance with which the method of examination is regarded, the desire for home examination calls for the consideration of authority; and, seventhly, that with regard to the importation of the disease, the applicability of the Merchant Shipping Act should be considered.

The Government of India, we are happy to learn, while fully cognisant of the difficulties encountered by the promoters of the Act in the Presidency of Bengal, is bent on adapting the law and the powers of the executive to the requirements of the case.

A correspondent of *The Times* has lately directed attention to the excessive prevalence of enthetic diseases among the men composing the British force in India. As regards the working of the Contagious Diseases Acts it is confessed that a systematic and satisfactory supervision has been attained in scarcely any of the larger stations of the different Presidencies of India. In the meantime, *The Times* correspondent points out that if the opponents of the Contagious Diseases Act would direct their efforts to an increase in the number of married soldiers, they would do more to remove the cause of the disease than by any other means. In 1868, "of 51,578 rank and file in all India only 4210 were married, or 8·11 per cent." What is the result? "The daily sick rate of the unmarried is more than double that of the married men, due, no doubt, in a great measure to venereal disease." Of course the remedy naturally suggests itself—viz., that marriage in the army ought to be greatly increased. Unfortunately, however, this would necessitate a large increase in the expenditure, and it must be remembered that the amount of disease and mortality among soldiers' wives and families in India is terribly great.

THE LANCET.

LONDON: SATURDAY, OCTOBER 1, 1870.

WE have this year the advantage of addressing our words of welcome and encouragement to those who are now commencing their medical curriculum before they are overwhelmed with the flood of eloquence—or of platitudes—which is comprised in the introductory address delivered at each of our schools, except (for reasons best known to its managers) that of St. Bartholomew's Hospital. Only three of the London schools hold their inaugural meeting on the 1st October this year; the bulk of the new students will, therefore, have ample time to recover from the effects of THE LANCET's lecture before being submitted to the process of "introduction" a second time.

We have no wish, however, to depress our young readers, or to repress the ardour of youth in the study and pursuit of the science and art which they have selected as their career in life. An honourable profession and an honoured practice of the art of healing are goals worth attaining, even without the stimulus of self-interest; and yet it is a satisfaction to know that of the five hundred or so "freshmen" who will join the several London schools during the next few days—to say nothing of those entering the provincial schools, or about to join the Scotch or Irish schools next month,—not one need, save from some failure or fault of his own, be at a loss to obtain employment so soon as he can show by his diplomas that he is qualified to practise the healing art. The position which any given student of to-day may attain in years to come will depend in no small degree upon the use he makes of the coming session. If devoted to earnest study of the theoretical subjects brought before him, without however losing sight altogether of the hospital and its more practical teaching, the first-year's man will be surprised at the end of six months at the large store of good sound knowledge he has laid by. If, on the contrary, wasted in desultory reading, without any plan, but with frequent interruption in the pursuit of pleasure, the months will glide away rapidly enough indeed, but too rapidly for any good to be left behind; and a wasted session cannot be easily regained.

Leaving the special direction of the student's studies to the several lecturers, there are just two dangers upon which we wish to say a few words. The first is, lest those (and their number increases yearly) who enter at a medical school without any preliminary medical training should imagine that the mere study of books, the diligent application of the schoolboy, which has hitherto stood them in good stead, will alone make them practitioners of medicine. Theoretical studies there must be, but only as preliminary to practical work in the dissecting-room, laboratory, and wards of the hospital. If the first are carried to excess the latter is sure to be neglected, and it may not be out of place therefore to warn the diligent book-worm of the proverb—*Nemo e libris evasit artifex*. On the other hand, the student who has seen something of routine practice in the country, and has been in the habit for months perhaps of conducting a pauper practice under the wing of his master, with not *more* than the average mortality, is apt to despise the scientific studies upon which the medical art is based, and to declare his preference for more practical subjects, on which he fancies himself already at home. Perilous indeed will be his position when the ordeal of an examination in these same despised subjects comes round; and disgraceful would it be were he allowed to escape such tests of a knowledge without which practice becomes a mere rule of thumb. When properly grounded in the theory of his art, he will be better able to appreciate the *rationale* of practice, and may then be brought to confess how little really was his previous stock of information.

Fortunately, it matters comparatively little in the end at which school a pupil enters, for at each he can learn quite as much as can well be taught of the science of Medicine. One hospital may possess advantages over another in its systematic or in its clinical teaching; and if either is to weigh in the balance it should undoubtedly be the latter. To become a *practitioner* the student must *practise*; and every hospital affords opportunity for practice, at first under supervision, and afterwards on separate responsibility. If he never puts himself forward to take responsibility during his student days, so as to accustom himself to the burden, it will fall upon him with crushing force when he embarks in practice on his own account; and we hardly know which is most to be pitied under the circumstances—the doctor or the patient.

That such a fate does not await those we are now addressing, we sincerely trust; and would again remind them that their lot in life will, in great measure, be settled by the fruit which the next few weeks may bear.

THE determination of the nature and mode of existence of the contagious principles of zymotic diseases has hitherto baffled the keenest search of scientific workers, but the employment of improved methods of observation is at length beginning to remove much of the mystery which envelops the subject of contagion, and light is being thereby thrown from several quarters upon the intimate character of contagia. Necessarily, until we have unraveled the nature of zymotic poisons, it is impossible to make any real progress in the discovery of efficient means of averting the spread of epidemic and contagious diseases. The result which must sooner or later follow the discovery of the physical and vital characters of contagia cannot be even approximately calculated, if, as recent researches seem to show, the domain of zymotic diseases is much larger than has been supposed, and includes not only the familiar pests of our crowded populations and foul localities, but such things, very possibly, as tubercle and cancer. It is therefore with great satisfaction that we record the conclusions at which Dr. SANDERSON has arrived in the matter, as the result of a special investigation conducted for the Privy Council, and which is given in detail in Mr. SIMON's recently issued Report, and was incidentally referred to by Professor HUXLEY in his late address,—the investigation being introductory to further experiments in contemplation. The

fundamental inference to be drawn from the facts which have come under the cognisance of Dr. SANDERSON, especially in extending and repeating very carefully the diffusion and inoculation experiments of M. CHAUVEAU, of Lyons, with vaccine lymph, and in other experiments with the cattle-plague poison, is neither more nor less than this: that every kind of contagium, as regards its physical form, consists of extremely minute, separate, solid particles, to which the term *microzymes* is given; these particles being spheroidal, transparent, of gelatinous consistence, of density equal to that of the animal fluid in which they are contained, and therefore not deposited by subsidence, and composed of albuminous matter. They are organised beings, self-multiplying organic forms. Indeed, only on this supposition is it possible to explain the rapid reproduction of the contagia within the body of the infected, and the possession of the power they exhibit to resist for long periods of time the operation of conditions which, if not restrained by organic action, would produce in them chemical decomposition. The condition of pepsine in gastric juice is cited by Dr. SANDERSON as analogous to that of the contagia or microzymes; for pepsine does not interfere with the transparency of the gastric liquid, and it cannot be separated by subsidence or filtration, being nevertheless wholly indiffusible, whilst its action on food is probably similar to that of the zymotic principles—inducing change in other substances without itself participating in the transformations. The results of M. CHAUVEAU'S experiments with small-pox, sheep-pox, and farcy poisons all tell in the same direction. These have been presented to our readers on former occasions. Dr. SANDERSON appeals to them in support of his proposition relative to the physical characters of contagia. Further, the effect of the dilution of specific poisons, such as vaccine matter, affords additional proof that contagia are composed of minute particles. One result of dilution is the diminution in the certainty of successful inoculation; but provided there is any effect at all upon inoculation with diluted matter, the result is not a comparative one, but the eruption and constitutional disturbance are typically pronounced. The smallest quantity of infecting material communicates the disease, when inoculation is successful, as fully as the most undiluted matter. If contagia were soluble, every portion of diluted virus should be equally active. On the supposition, moreover, that the contagia are gaseous or made up of other than solid particles, it is impossible to explain the attack of individuals by zymotic disease after having been free therefrom, though continuously fully exposed to the influence of the poisons, under like conditions, during a long time. If solid, the contagion must be one of chance in relation to the distribution of the poison. As Dr. SANDERSON remarks, a railway guard, who has made the same journey every day for the last ten years, is just as likely to meet with an accident to-day as he was the first day he was on duty, because the coincidence of circumstances which leads to an accident is just as probable on one day as another. So in like manner a person of given susceptibility, who has lived a year in an infected atmosphere, runs the same risk on the last as on the first day of his exposure. So much for the physical characters of contagia or microzymes. There appears to be considerable doubt as to what organic forms the contagia may be referred—plants or animals. Dr. SANDERSON holds that their behaviour points to fungi as their source; and to the elucidation of this subject his further researches will be directed. The contagium particles or microzymes, the micrococci of HALLIER, which give rise to bacteridia and the like, and at present regarded as derived from fungi, if of the *same* species, could not bear any direct relation to contagion; and it is believed that if they are the true contagia, they must, in different diseases, though apparently of similar appearance, each possess specific characters as well as exhibit different morphological changes which may yet become appreciable in course of observation. Professor HALLIER has failed at present to define the specificity of microzymes; but this affords no grounds for supposing that contagium particles are not microzymes. Dr. SANDERSON ventures his opinion that an experimental investigation of the organoleptic properties of microzymes in general seems to be the channel by which we shall probably arrive at the solution of the all-important problem of contagion. The task is a difficult one. Do microzymes take origin from fungi?—and if so, are such possessed of distinctive morbific qualities, or can they arise *de novo* in diseased tissues? These are the chief questions awaiting solution. HALLIER takes the former ground; but we cannot ourselves grant that his experiments have been sufficiently carefully conducted, with reference to fallacies, as to warrant us in accepting his conclusions. Others do not deny the origin of microzymes from fungi, but hold that they take origin as the result of chemical changes in connexion with putrefaction of the actual protoplasm, and not of alteration of the cell-contents.

Here the matter stands for the present; but we cannot doubt that, now that the investigation is narrowed down to something like its proper limits, we shall soon be put in possession of reliable facts touching the exact character of those minute spheroidal organic bodies—the microzymes—which abound in infecting fluids. It must be apparent to the reader that the tendency of recent researches is to induce a reaction in favour of the fungus origin of zymotic disease.

EVERY judicious medical practitioner will admit that the use of purgatives is one of the most important questions in the practice of physic, and one which it behoves us, as medical journalists, to consider from time to time. The remedies in question are ready and popular; they produce palpable effects, and in many cases very beneficial effects. They are almost the only members of the evacuant class of remedies left us by the present doctrines or fashions of medical practice. Bloodletting has become almost a mere matter of history; emetics are used almost as infrequently. But there remains one evacuant or eliminant measure to which we have frequent recourse. And it is the use of this measure which we discuss to-day. Medical men vary much in their practice in regard to this point: some using purgatives almost as a matter-of-course element in the treatment of every case; others regarding the need for them as so exceptional and generally uncalled-for as to forget them too much, and occasionally fail to use them when they should,

to the great temporary inconvenience of their patients. If we were patients shut up to a choice between these two extremes, we should decidedly elect to be treated by the practitioner who under-purged his patients. The general character of our views on this subject is well expressed in the classical paper by Sir HENRY HOLLAND "On the Abuse of Purgative Medicines." This accomplished physician says:

"If asked whether the use of purgative medicines, beneficial beyond all others, under certain conditions, is not carried too far in modern English practice, I must affirm my belief that it is so; and each successive year of experience strengthens this conviction."

The use of purgatives should be regulated by a strict regard—first, to what nature can do without them; secondly, to what assistance they can give nature; and, thirdly, by a clear conception of certain things which they cannot do, and which good practitioners will not expect them to do. Under one or other of these heads we shall hope to say most of what we have to say. For the rest, we will be content to leave the subject to the consideration of our readers in the light of their practice.

First, then, as to what nature can do without purgatives. And here the first remark we have to make may seem to some readers too obvious to be necessary; but it is very important. It is this: nature can generally, and as a rule, accomplish the evacuation of the bowels sufficiently often, if not daily, without the use of purgatives. There are persons still alive who have not gone to bed for fifty years without taking an opening pill. And there are a great many persons who think it necessary to take such medicines frequently. Just as, formerly, people thought it necessary to be bled at stated times, so now some people think it necessary to purge themselves. Others do it from a most painful belief that one of the chief duties of man is to secure a daily action of the bowels. If this is not procured they think there must be something wrong, and they have recourse to the old and rude procedure of a strong purgative, which acts repeatedly in one day, and probably leaves them in a state of more hopeless constipation than before. Such practices should have no sanction from scientific medicine. The frequency with which the bowels should be evacuated varies greatly in different individuals. There is no physiological or moral reason for a daily visit to the watercloset; though if such be the disposition of nature, it is well. Every practitioner must know that there is much difference in this matter among persons that are equally healthy. But even where there is constipation, decided and inconvenient, this is no reason for attacking it at once with strong purgatives. The probability is that it depends upon some faulty habit of the individual: that he smokes too much, or sits too much, or drinks too much beer or tea or port wine, or that his food is too dry and too destitute of succulent vegetables. The regulation of the faulty habit will probably suffice to cure his constipation. If it does not, some tonic laxative will be indicated, the action of which shall resemble most the natural action of the bowels, and which shall tone the bowel to a natural and habitual action, rather than irritate it to a spasmodic and short expulsive effort. In other words, not one large purgative dose should be given, but repeated doses of some mild and aperient tonic. Sir HENRY HOLLAND advised, in these cases, bark, either alone or in combination with a few drachms of infusion of senna. The combination of sulphate of iron and small doses of aloes with a little extract of henbane and gentian makes a very valuable pill in such cases. It is astonishing to notice, in regard to this pill, the variable effect in different cases of small quantities of aloes. In some cases a mere fraction of a grain is sufficient with the iron to procure a comfortable action of the bowels.

Before we leave the subject of constipation we must add a caution to practitioners that dislike purgatives, lest occasionally they find themselves off their guard and trifling with a case where the colon and even the smaller intestines are loaded with accumulated fæces. This error is less than the alternative error of treating every patient as if he had a loaded colon. But, for all that, it is an error or an oversight. It is most likely to happen in the case of women, especially of ladies, of lax fibre, that are too comfortably circumstanced, who live too richly and walk too little. Even here strong purgatives are not indicated, but enemas frequently repeated, and moderate doses of efficient purgatives. After present relief has been afforded to those symptoms—probably of colic or discomfort, probably of obstruction,—the bowels must be treated with a tonic laxative medicine, such as that above described, and a proper regulation of diet.

We have in our last remarks admitted the great good which purgatives, rightly used, are capable of doing. But there are other cases to be mentioned showing how indispensable they are in medical practice. Amongst these are cases of albuminuria, after scarlatina or otherwise; anasarca from other causes; serous apoplexy. It is important in these cases not to depress vital power too much, and to accompany the purgative with broths and other nutritious food. There are few more satisfactory cases in practice than those of albuminuria after scarlet fever treated with occasional compound powder of jalap, and more frequent doses of tincture of perchloride of iron. It seems as if there was a real elimination not only of fluid but of urea in such cases. In mild cases of the sort, however, this treatment is not required, the administration of broths and of diuretic quantities of barley-water or toast-water sufficing to complement the natural tendency to recover.

Now let us say a few words as to things which purgatives cannot do. *They cannot eliminate morbid poisons.* Nobody now believes they can do this in regard to eruptive fevers, including typhus and typhoid. We are loth to say a word in difference from Sir HENRY HOLLAND'S admirable remarks, but the importance of the point is a sufficient excuse. He lauds the action of the full use of purgatives in typhoid fever. It is now generally admitted that purgatives are to be most charily used in this disease, where the intestine is so invariably affected, often to ulceration. And it has certainly appeared to us that light opiates are most beneficial in this state, and that the cases do best in which there is most tendency to constipation. Another very esteemed medical Baronet has intimated his intention, in the event of another epidemic of cholera, to take a dose of castor oil with a view of the eliminating effect of it. We are sure

that the whole medical world hopes that Sir THOS. WATSON will not have the chance of testing the wisdom of this intention, which does not seem to us warranted by anything known in regard to the action of purgatives in other diseases comparable to cholera. Secondly, *purgatives cannot remove a clot on or in the brain.* The pathology of true apoplexy, as now elucidated, with bloodvessels degenerated and the heart probably impaired in texture, greatly alters the question of using purgatives in such cases. If, indeed, we are in doubt as to whether the effusion is serous or sanguine, they may be employed, but with care and discrimination. Another thing purgatives cannot do — *they cannot overcome a mechanical obstruction of the bowels.* And in cases of such obstruction they should be given most cautiously, and in such forms and doses as to irritate as little as possible. There is a less serious case, but a much more common one, in which purgatives are almost constantly used—namely, that of lying-in women. The traditional rule of a purgative on the third day, which has been observed better than most of the ten commandments, should be reconsidered. Often the practice is quite uncalled for because unnecessary; and in other cases the excessive action of the bowels weakens the patient, lessens the amount of milk, and retards the healing of the parts by disturbance. At the same time a laxative is not seldom needed, and none is better than castor oil; but it should only be given when necessary, and in teaspoonfuls rather than in half-ounces.

THE Health Section of the Social Science Congress at Newcastle has been for the past week engaged in the discussion of most important questions, which must largely occupy the attention of the Legislature in the coming session.

The changes that are required in our Sanitary Laws and administration, and the manner in which the refuse of our towns and cities may most advantageously be disposed of, are matters pressing for solution in the best interests of the community. The Royal Sanitary Commission, by its president, Sir C. ADDERLEY, who was specially present on Monday to hear and take part in the discussion of the first of these questions, informed the section that the report of the Commission was in preparation, and that in a few weeks it would be in the hands of the Government, in time for legislation in the session 1871. By general consent it would appear that the laws at present existing are sufficiently powerful, if they were but sufficiently clear; but the statute-book has been so encumbered in the short space of the last twenty-two years—since the passing of the Public Health Act, 1848—by patchwork legislation, that it is now acknowledged, by the most learned judges on the Bench, that it is utterly impossible to interpret the conflicting clauses of the various Acts, so often have they been amended, altered, and enlarged. Besides this, they have created conflicting authorities, and, under the semblance of compulsory action, have allowed work everywhere to be permissive; and the extent of the apathy of local bodies may be estimated by the fact that, in the report of 1869 issued by the Local Government Act Office, it appears that only £35,000 had been spent in a year for drainage and water-supply by the whole of the authorities who are required to have the sanction of the Home Secretary before expenditure can be made on works. Perhaps some of this indifference to the wants of the people may be traced to the fact that sanitary doctors still disagree as to the remedy for the troubles which everywhere attend the aggregation of individuals in limited areas. Intermittent filtration, chemical decomposition and deposition, and irrigation have each their advocates; while those are to be found who, on the one hand, either loudly praise, or with equal vehemence denounce, water-carrying of sewage, and, on the other, who tell us that the dry system by earth and ashes is the only mode which promises freedom from all our earthly ills. The Sanitary Commission very wisely determined that it was no part of its duty to consider the merits or demerits of these varying systems; but the Rivers Pollution Commission, under the presidency of Sir W. DENISON, in its last two reports, has given most valuable data for the determination of the question, unhesitatingly condemning all the chemical systems proposed, as unequal to the task, and as also failing to make those valuable solid manures from the sewage about which the public has lately heard so much. Practically, these reports arrive at the conclusion that the only present feasible mode of disposal of sewage is by the irrigation of land; and they adduce evidence that this method is not in any way injurious to health or likely to create a nuisance, while it so purifies the matter subject to its influence that the effluent water may with safety be poured into any adjacent stream or river. We may, then, look to see this plan largely adopted; and already—in the last session of Parliament—three large towns, Blackburn, Reading, and Merthyr Tydvil, have obtained powers to take nearly three thousand acres of land for this purpose. The paper read on Monday by Mr. MICHAEL proposes, as the basis of further legislation—the codification of existing laws; the appointment of a central authority, to combine, under a Ministry of Health, the functions now discharged by the Home Office, the Privy Council, the Board of Trade, and the General Register Office, with a head medical officer and subordinate medical officers of health in every district; the whole country to be divided into local boards—that is, existing ones remaining with new centres in districts now left to vestries and boards of guardians, and these grouped into unions, to act as intermediate bodies in enforcing compulsory action, before application to a central authority; an elevation of the status of these local boards by an admixture of the owner or magistrate representation in addition to the present ratepayer element; and a reconstruction of the financial position, by relieving local boards in certain cases from the necessity of repayment in thirty years, by allowing the mortgaging of property acquired, and also by more equably distributing the incidence of rating and its burden. To this scheme, in its main features, Sir C. ADDERLEY gives his adhesion, except that he proposes to continue boards of guardians by committees of those bodies as health authorities in rural districts, continuing local authorities where they now exist. It would be an unmixed good if we could see a thorough supervision of Health Acts throughout the country, instead of, as now, the mere desultory action of irre-

sponsible boards. To diminish the excessive sickness and mortality of our towns and cities, there must be, as Mr. RAWLINSON pointed out in his address on Monday, attention given to the homes of the people. Improved drainage and water-supply will do nothing if they are not brought to the very habitations of the poor; and no attempts at cure, however showy or excessive, will improve our national condition, if morality, decency, and the first conditions of health are allowed to be outraged by the continuance of overcrowded and filthy dwellings. The munificent donations of Mr. PEABODY—the efforts of men like Sir SIDNEY WATERLOW to provide better habitations—the Artisans' Dwellings Act,—these will do much in the next half-century to relieve our present deplorable condition, by which we allow nests of fever and cholera to be at our own doors, ready to spread their dreadful infection into our houses—crowding our dispensaries, hospitals, and gaols with the victims of our neglect, to be paid for by ourselves as a righteous penalty for our short-sighted apathy and carelessness. Pure air, pure water, and pure food, with healthy homes, will work a revolution in our social condition; and will enable us to dispense with a host of hospital attendants and prison functionaries; for health, morality, and religion are as inseparable as disease, depravity, and crime.

We may well, then, earnestly ask that in any measure to promote the public health we may have, in the words of the paper of Mr. MICHAEL, simplicity in the law and efficiency in its action.

Medical Annotations.

"Ne quid nimis."

AN INDIAN SCHOOL OF MEDICINE.

WE have received a copy of an Address delivered by Dr. W. B. Beatson, Principal of the Nagpore School of Medicine, on the occasion of the first distribution of prizes and diplomas in July last, from which we gather the following interesting facts. The Nagpore School was founded in 1867 by Sir Richard Temple, then Chief Commissioner, Dr. Townsend, the present Sanitary Commissioner, being the first principal. The object of the school was to furnish medical education for the inhabitants of the Central Provinces of India, and it has already sent out several intelligent and well-instructed natives adapted to recruit the ranks of the subordinate medical department. One great object of the Government in the establishment of the school was to interest the Mahrattas in the study of medicine; but this has proved a failure, owing chiefly to their caste prejudices forbidding their engaging in the practical study of anatomy.

According to Dr. Beatson, this prejudice against dissection is of modern growth. In days when European nations were in a state of barbarism, the Hindu physicians already taught anatomy and practised dissections. Gradually the growth of caste prejudices increased, and it became unlawful to touch a dead body, and no anatomical study was attempted in India until a regular course of lectures was given in the newly-established Medical College of Bengal thirty-five years ago.

The success of anatomical teaching in Calcutta appears to have depended in no small degree on one student, the Brahmin Moodoo Soodun Goopta, who, "casting aside the trammels of superstition, and rising superior to the prejudices of the day, resorted to the practice of the old Hindu physicians, dared to meddle with mortality, and with his own hands engaged in dissection."

During the session of 1869 there were forty-nine active students at this school, of whom nine had passed their final examination, and were presented with their diplomas on the occasion referred to. An excellent practice, which might be beneficially introduced elsewhere, is, we observe, in force in India—viz., the dismissal of pupils who from incapacity or idleness fail to make due progress.

We congratulate Dr. Beatson on the prosperity of his school, and on the address he delivered, which we agree with the Chief Commissioner in terming "eloquent and instructive"; and we wish him and his pupils every success.

THE HUMAN VOICE.

THE exhibition in London of a machine by which many, if not most, of the sounds of the human voice are imitated, and the recent publication of a little work by Prof. Hullah "On the Cultivation of the Speaking Voice," especially direct attention at the present moment to the subject of vocalisation; and it is remarkable how the machine illustrates the statements of the author.

Mr. Hullah lays down that "besides *pitch*, *intensity*, and *duration*, sound has a fourth property, technically called *timbre*, popularly *quality*;" and again, that "of the four properties of the voice—intensity, compass, flexibility, and *timbre*,—incomparably the most important, *timbre*, depends not on the lungs, windpipe, or larynx, but almost exclusively on the disposition of that portion of the vocal mechanism which is most open to observation and most obedient to the will"—i.e., the mouth. The speaker or singer can observe this on his own person in a looking-glass, and the machine alluded to illustrates the same fact. Thus the removal of the mask or face does away with the nasal tone required in the pronunciation of French words; and, the true mouth and lips being then exposed, it can be seen that the production of various words depends upon movements of the lips, tongue, and palate, without alteration in the size of the larynx.

Mr. Hullah calls especial attention to the common mistake of the almost exclusive use of the upper "register" or "head voice," which is totally unfitted for public speaking or for any sustained effort. To this, and to the want of practice in the art of speaking, he attributes "clerical sore-throat." As regards the compass of the voice, the axiom is laid down that, "whether of speaker or singer, the part of the voice most often to be called into requisition, and therefore most important, is that which is *farthest from the extremes*." Valuable remarks are made upon the vocal elements; and the author proceeds to show that, by practising sustained sounds (of which tables are given), the speaker may attain excellence with the same amount of care as does the vocalist. At the commencement of a session, when numerous lecturers are about to begin a six months' course, we would commend Mr. Hullah's little book to their especial notice; and they may find, in its concluding pages particularly, some hints which may make their lectures less irksome to themselves and possibly more interesting to their audiences; at all events they may learn how to evade that most trying of all ordeals—a coughing audience.

To return to the very ingenious talking machine. This, it appears, is the original production of Professor Faber, which has been completed by his nephew, the exhibitor. It is not pretended that all the sounds of the voice are produced in precisely the same manner as in the living subject, though most of them are; and it is very interesting to

watch the movements of the lips and tongue, and contrast them with one's own organs under similar circumstances. The spectator is well able to appreciate the complexity of even a single word when he notices the numerous levers which Madame Faber has to manipulate *seriatim* for its production. And here appears really to be the difficulty in producing some English words—the want of practice of the performer, who has to learn to speak, as it were, through the machine. As respects the ingenuity of the machine there can be no question, nor can there be the least suspicion of false play, as was the case in the absurd "Anthropoglossus" exhibited some years back.

THE PROGRESS OF CHOLERA.

WE have to report the still further progress of cholera. The information we possessed at the time of our last report (*ante*, p. 347), showed that the disease existed at Kertch, at Rostov on the Don, at Taganrog, and at Odessa. Later news proves that the epidemic was more widely extended than the earlier news indicated, and that it is still extending. In July cholera was present, in addition to the places already named, at Kharkov, Berdiansk, Theodosia (Kaffa), in the district of Bogorodsk, and in the district of Korotcha, government of Koursk. Subsequently (so far as the dates received permit a judgment), it appeared at Tsaritsyne, at Efremow, in the government of the Toula, and extended along the north-eastern coast of the Black Sea, as low as Soukhum-Kali. Further, on the 17th August, cholera broke out in St. Petersburg. At the present moment the epidemic prevails along the whole coast of the Sea of Azov, on the north-eastern coast of the Black Sea; it has broken out in the Crimea, and at Odessa; it prevails at several points in South Russia, and Little Russia; at one point at least of the southern part of Great Russia (Bogorodsk), and has extended across the continent to St. Petersburg.

The first ascertained case of the disease in St. Petersburg occurred on the 17th August, and from that date to 28th August there had been recorded in the city 165 cases, of which 66 had died. An official return, published in the *Journal de St. Petersbourg* of the 14th Sept., states that, on August 31st, the number of known cases of cholera in the city were 141 (105 males and 36 females), that during the day 34 new cases had occurred (30 males and 4 females) and twelve cases had died (10 males and 2 females), and that there remained under treatment on the 1st September 163 cases (125 males and 38 females).

A Sanitary Commission appointed by the Emperor has come to the conclusion that cholera has not been introduced into the city from without; and that, having regard to the esoteric origin of the disease, and the then state of the temperature (the state not being specified in the summary of the Sanitary Commission's report in the public journals), a wide development of the epidemic need not be apprehended. It is not quite easy to understand how the Commission has satisfied itself that the disease has not been imported. Certain of the localities in which cholera was prevalent in July have direct railway communication with St. Petersburg; and it is not unimportant to remember that late in 1869 the epidemic was present at Nijni-Novgorod, at Kieff, and at Moscow, and that in the last-named city the disease had not altogether ceased in March. All necessary preliminary measures, medical and sanitary, have been adopted in St. Petersburg to control the epidemic.

A recrudescence of cholera is also reported to have taken place in Persia. The epidemic has broken out in the south-eastern province of that country, at Kerman; also in the west-central districts (so to speak) at Sultanabad, at Burroojird, and at Hamadan. A telegram from Constantinople, on September 23rd, states that the Shah is about shortly to undertake a pilgrimage, in the hope of the devastations of cholera in Persia (which have been very great during the past four years) being thereby diminished.

THE LIVER THE SEAT OF FORMATION OF UREA.

THE latest researches upon the place of origin of urea, and especially the beautiful experiments of M. Gréhant, have demonstrated that the kidneys are by no means secretory, but purely excretory, organs for urea. Dr. Cyon, in the last number of the *Centralblatt*, publishes a few facts in the form of a provisional communication, to show that it is probably produced at the liver. The plan of experimentation adopted (in common with M. Istomin) was as follows: The whole of the blood was abstracted from the carotid of a dog, and a portion, after being defibrinated, was transmitted by means of mercurial pressure through the liver. Coincidently three canulæ were introduced—one into the inferior vena cava, the second into the hepatic artery, and the third into the vena porta. The results of careful analysis showed that the blood which had passed through the liver contained a much larger proportion of urea than ordinary arterial blood. In one experiment 100 c.c. of the arterial blood when defibrinated contained 0·08 grammes of urea; but after having been passed four times through the liver, the same quantity contained 0·176 grammes.

THE VENTILATION OF SCHOOLS.

PARENTS will generally take the greatest care in any selection they may have to make of a school for their children,—especially their daughters. Their inquiries as to the moral and social tone that prevails, and the means that exist for their girls' instruction in modern languages and music, will be minute enough. They generally have the good sense to satisfy themselves on these points; but they rarely possess the knowledge, if even they take the trouble, to ascertain whether the internal hygienic arrangements of the school be satisfactory or not. Tuition is so commonly seized upon as a genteel means of livelihood by poor ladies, that there is probably no walk of life in which so many incompetent persons are engaged; and it happens, unfortunately, that several of those who are in every way qualified for the task occupy houses which are not adapted for school purposes. The number of pupils ordinarily occupying the school-room is perhaps too large, and fluctuations in the number of pupils take place without any corresponding alterations in the arrangement of the house. The consequence is that overcrowding ensues; the ventilation is bad, the air becomes stuffy in the extreme, and the children lose their appetites and complexions, become pasty, delicate, and liable to contract "colds." The usual run to the seaside has to be anticipated in order to recruit their health. This is not to be considered in any degree as an imaginary picture. It has occurred over and over again in the experience of most physicians that children suffer from headaches and loss of appetite when attending school. A shrewd and observant man will generally find that symptoms erroneously attributed to overwork are, in reality, due to want of air. When parents come to regard manifestations of physical delicacy in their daughters as scarcely less objectionable than manifestations of mental indelicacy—and the two are more often connected with some common cause than is imagined,—they will take the greatest pains to see that the household sanitary arrangements in a school are good. The truth is that the majority of houses of ordinary construction are quite unfitted for school purposes;

the rooms were never intended for school-rooms. There is deficiency of cubic space and window space; and it very often happens that the air which enters the room does so very indirectly after traversing the hall and staircase. We have ourselves known a number of young ladies to be shut up in a room in which they were far worse off, as regards air and ventilation, than soldiers in barracks. Let parents make a point of always inspecting the rooms used as school-rooms, and of ascertaining their size and the average number of occupants, and they can easily discover whether the air space is utterly insufficient, as it very often is. Next, let them look to the number and position of the windows, doors, and fireplaces, and they will get some idea whether these are so placed as to facilitate the movement and supply of an adequate amount of fresh air. If, however, any doubt exists whether a room be adapted for occupation by a number of growing girls for several hours together, they have only to pay a visit to a school-room after it has been occupied for a couple of hours, and note the difference existing between the external and internal air, to convince themselves by a rough test of its purity or otherwise.

BABY-FARMERS, BEWARE!

THE trial of the Brixton baby-farmers, Waters and Ellis, at the Central Criminal Court, has resulted in the condemnation to death of the first-named of these two women; while the second, being regarded merely as an instrument in the hands of her principal, has escaped the graver penalty, and has been sentenced to eighteen months' imprisonment with hard labour on the secondary charge of obtaining money under false pretences. By this time it will no doubt have become clear to all who are engaged in a similar line of business that it can no longer be carried on upon the Waters and Ellis system without extreme risk. The possibilities of the condemned cell—whether the ultimate perspective be closed by the gallows or penal servitude for life—will, in all likelihood, have within the last week presented themselves with startling force to the callous sisterhood of which Margaret Waters is the public ensample. The details of her trial show that she was alive to the importance of secrecy in her transactions. There was no lack of cunning in her endeavours to keep interested parties away from her den; nevertheless she was not able to avert detection at last. The lesson can hardly fail to make its full impression, especially when it is coupled with the presumption that the activity of the police is likely to be stimulated by the praise and the substantial mark of approbation which have been justly awarded to Sergeant Relf for his services in bringing Waters and Ellis to justice. It may be that there are other baby-farmers who, like Margaret Waters, are conscious that they are living "a life of deceit and falsehood," yet who, like her, have laid the flattering unction to their souls that in slowly narcotising and starving children to death they are not committing murder. We hope that all such will carefully study the evidence at this trial, in order that their eyes may be opened to the truth of their position before it is too late.

If there was ever the slightest doubt of the need for some public supervision of baby-farms, it must surely have been dissipated by the disclosures relating to the establishment at Brixton. There are circumstances not necessarily resulting from immorality in which young children have to be placed out to nurse, and in the case of infants born illegitimate it would be but to take away (too often) their only chance of existence if baby-farms were altogether put down. But a baby-farm should no more be permitted to exist free from supervision than a common lodging-house or a lunatic asylum. We have not been able to approve of some schemes which have been put forward for bringing about this supervision, because they have seemed to us far more complicated than was either requisite or desirable. All that is needful is, that the fact of a baby-farm being established in any district should be made known to the local authorities of that district, in order that a proper medical and sanitary supervision should be instituted in respect of such baby-farm. We doubt not that a simple and effective way of accomplishing this object would soon be suggested to the Government if it were understood that action was about to be taken in the matter. And until this comes about, it may be hoped that the registration officers and the police together will do all they can to bring to light any existing enormity such as that of the now defunct Brixton baby-farm.

SANITARY ROAD-WATERING.

AT the meeting of the British Association for the Advancement of Science Mr. Cooper read a paper on a subject of considerable interest. This gentleman is the patentee of the method of watering roads with a solution of deliquescent chlorides, which is now being tried on a large scale in Westminster. The object of his paper was not only to state some of the general results which his method had attained, but also to call attention to the special value of some of the chlorides in chemically deodorising and disinfecting the offensive constituents of street surfaces. He referred particularly to the value of the chloride of aluminium, recently introduced into use by Professor Gamgee, whose letter upon the subject will be in the recollection of our readers. Persons who are accustomed to traverse London streets and thoroughfares are familiar with the extremely ammoniacal character of the exhalations from them. This is perhaps most to be noticed on Sunday evenings in dry weather, when the surfaces have not been watered for twenty-four hours, and when the dust, and the gases that accompany it, are often of quite a distressing pungency. It is manifest that the chief source of street ammonia is furnished by horse droppings, which soon become pulverised and spread abroad. The recent institution of street orderly boys will do something to diminish the nuisance; but Mr. Cooper justly says that it is still considerable, and that the reality of the evil may be measured by the disgusting odour and poisonous qualities of some of the antiseptics that have been used against it as the lesser of the two. The filthy mendicants who are permitted by the absence of municipal government to infest our public urinals, and to make them artificially loathsome by chloride of lime, may be taken as illustrations of the point. Mr. Cooper claims for his present solution, which contains the chlorides of sodium and calcium, that the chloride of calcium decomposes the carbonate of ammonia of the horse droppings, and produces carbonate of lime and chloride of ammonium, which salts, combining with the chloride of sodium, serve to form a layer of concrete on the surface. He now suggests that to the original solution a portion of chloride of aluminium should be added; and he thinks that it would completely purify and disinfect the streets over which it was spread. He describes it as being non-poisonous, free from odour, a powerful preventive of decomposition, an absorbent of noxious gases, a destroyer of parasites and germs, an excellent precipitant and deodoriser of sewage, and one-third the price of carbolic acid. We wish that Mr. Cooper could give us some trustworthy data with regard to the probable quantity of organic matter requiring to be dealt with in the streets, because, after all, the virtues of the chloride of aluminium will be of small avail unless we are able to use enough of it to overcome the whole of the noxious agents against which it is said to be so potent. We want to know first, how much of the chlo-

ride will fix the ammonia of a pound of horse-dung; next, how many pounds of horse-dung we have to deal with; and lastly, whether the relations between these two factors of the question are such as to bring within moderate and practicable limits the total quantity of the salt that would be required. Mr. Cooper has now great facilities for determining such points as these, and we trust that he will turn them to good account.

THE ART OF PRESCRIBING.

THE art of prescribing, as understood by our fathers, is certainly dying out, if it is not already dead. Prescriptions are simplified, and we often give single drugs, but few modern prescribers being careful to follow the old rule which placed the "basis" first, then the "auxiliary," afterwards the "corrective," and lastly the "vehicle." Still, we think that the teachers of the present day err somewhat in paying no attention to the instruction of their pupils in the art of writing prescriptions, such as would be given to a private patient, to be compounded by an ordinary druggist. It saves time and trouble, no doubt, in hospital practice, to use formulæ for mixtures and pills, or even to refer to them by their number in the Hospital Pharmacopœia, without giving the name—a most objectionable practice on many grounds; but by so doing the student loses a good deal of useful instruction, and misses teaching to which he is, in our opinion, fairly entitled.

Then, again, with regard to the language of prescribing. There is a general consent that the "directions" should be in the vernacular, but the drugs and their quantities in Latin. Yet how seldom does a teacher dictate even the drugs in Latin, much less the quantities; and we believe that were an ordinary abbreviated prescription to be put into the hands of many advanced pupils, they could not put it into full Latin without committing various solecisms. We have no wish to return to the days when the unfortunate apothecary or druggist had to "do into English" such directions as the following: "Fiat mistura, cujus sumat æger cochlearia duo, urgente ventriculi dolore, flatû, nauseâ vel languore"; but we do think that every student, and certainly every teacher of medicine, should be able to read off any prescription, with the drugs and the quantities, in unabbreviated and grammatical Latin.

THE TREATMENT OF DRUNKARDS.

AN article in a recent number of *Macmillan's Magazine* gives an interesting account of one of the asylums for drunkards of which several have been founded with great success in America. The American laws, more paternal than our own, recognise the necessity for guarding the habitual drunkard against himself, and do not leave him at large until drink has ended in crime. Thus we find that "the committee of an habitual drunkard, duly appointed under the provisions of the laws of the State, can place such habitual drunkard in the asylum, and authorise his detention under such restraint as may be necessary to prevent his escape." A large proportion, however, of the inmates of these asylums are voluntary patients who place themselves there with a view to self-cure.

The New York State Inebriate Asylum has been in active operation since May, 1867. From that date to the end of 1868 the number of admissions was 310; 272 being paying patients, and 38 free. Of these patients, 147 were classed as periodical and 163 as constant drinkers, and the following were their antecedents: 96 had delirium tremens, 31 convulsions, and 73 other diseases; 101 were in good health, and 9 were supposed to have an hereditary tendency to intemperance. The average length of time each patient remained in the asylum was ninety-six days: 113 were reformed after a first trial; 11 relapsed, but were reformed after a second trial; whilst 4 relapsed a second time, but were reformed after a third visit; 25 were discharged hopeless; and of the remainder, in 68 the result was not known, whilst 3 were discharged insane and 4 died.

The asylum is described as a palatial hotel, situated on the top of a hill, with commanding views. No special treatment is adopted beyond a total disuse of intoxicating liquors, and restraint within the boundaries of the establishment is only moral. The patients breakfast at 8 A.M.; attend prayers, and then amuse or employ themselves as they please till a one-o'clock dinner; supper is served at 6 P.M.; and the evenings are occupied with "readings," dramatic representations, or, on one evening in the week, a lecture on temperance by the superintendent, Dr. Albert Day. No restriction is placed on the use of tobacco, and it is consumed in enormous quantities; coffee, also, is very largely consumed.

Permission to pass beyond the bounds of the asylum grounds can only be obtained from the superintendent, who judges of the amount of self-control acquired. Occasionally a "break-out" occurs, the patient usually returning at the end of his debauch, and being then placed in confinement for a day or two. Dr. Day insists upon the necessity for *total* abstinence after quitting the asylum; and maintains that "he has never known a man who had been intemperate to be able to drink at all without falling again into excess." We echo the wish of the writer in *Macmillan* that institutions of a kind similar to this asylum were established in this country.

RECENT OBSERVATIONS ON DIGESTION.

THE chemical and physiological conditions present in the alimentary canal are so complex in their nature, that every painstaking inquirer, notwithstanding the frequency with which the ground has been turned, seems to make fresh discoveries, or at least to open up new paths of research. The most recent investigations that have been made are those of Dr. Paschutin, who has had the resources of the excellent laboratory of Professor Setschenow, of St. Petersburg, at his disposal. His researches have chiefly been directed to the determination of the digestive powers of infusions of the mucous membrane of the intestine for albuminous compounds, and on the nature of the ferment converting starch and cane sugar into grape sugar. He states that aqueous infusions of the mucous membrane of the small or large intestine of the dog, when maintained at a temperature of about 100° F., undergo self-digestion, and in the course of three or four hours throw down voluminous precipitates of albumen that undergo no further change till putrefaction sets in, the liquid at the same time altering its reaction from alkaline to acid, and the material, whatever it may be, that is able to reduce oxide of copper, and which is always present in the fresh infusion, disappearing. The infusion of the mucous membrane appears to have no power of converting albuminous compounds into peptones, and only a slight power of emulsifying fats. He also found that the secretion of the small intestine obtained by Thiry's method was equally inoperative as regards albumen and fats. The infusion of the mucous membrane of the small intestine, however, can convert starch into sugar. It is curious to notice that this power is possessed also by the mucous membrane of the trachea, urinary bladder, and, though to a less marked extent, by that of the gall-bladder, cæcum, large intestine, stomach, and rectum. None of these, however, can, like the infusion of the mucous membrane of the small intestine, convert cane sugar into grape sugar. This last power he has found to be possessed by

the dog, pig, rat, mouse, and rabbit, but not by the membranes of the sheep and cow.

Further investigations enabled him to demonstrate that the infusions of those membranes that can convert starch into sugar and cane sugar into grape, contain *two* distinct ferments, the mode of separation of which would be too long to insert here. The infusion of the muscular layers of the small intestine furnishes the chief part of the ferment capable of converting starch into sugar. A temperature exceeding 104°F. seriously interferes with the action of the ferments. With regard to the saliva, he found that the temperature at which its peculiar ferment, when diluted with ten or twelve parts of water, acts upon cooked starch most intensely is from 100° to 106°F. It is more difficult to determine the temperature at which saliva exercises its greatest activity on uncooked starch; but it is certainly higher than the latter degree. When the ferment is weak it is probably about 144°F.; when concentrated, about 149°F. Dr. Paschutin shows that the admission of air at ordinary temperatures to starch paste speedily causes the formation of a material that is capable of acting as a ferment, and is capable of reducing oxide of copper. Such modified starch-paste can act as a ferment to fresh paste, but the power is destroyed by boiling.

IMPROVEMENTS AT CHARING-CROSS HOSPITAL.

BY a recent acquisition the hospital authorities of Charing-cross Hospital have become masters of certain house property in Chandos-street, which they are about to utilise for the benefit of the hospital and of the school. The existing hospital arrangements will be considerably improved, but the most important benefits will be conferred on the school premises, which, indeed, are in course of complete metamorphosis. The ground floor and basement of the Chandos-street premises will be given up to the library and librarian's rooms, students' rooms, lecturers' rooms, *&c.*, whilst a vacant space of ground has been seized upon to construct one of the most elegant little chemical laboratories in London. But as now-a-days the practical teaching of anatomy is looked upon as the great groundwork of medicine, the wants of the student in this respect have been duly consulted, and a commodious and excellently-lighted dissecting-room is now in course of construction. This will be faced round with slate for the sake of better illustrating anatomical minutiæ. The post-mortem room has also been completely renovated, affording excellent light and plenty of room. The new museum will be so arranged as to constitute a second class-room when required. In short, everything has been done to utilise to the utmost the somewhat contracted space which the value of land in the neighbourhood permits the authorities to occupy.

A SANITARY DETACHMENT ON THE BATTLE-FIELD.

A MEDICAL OFFICER doing duty with a Prussian ambulance forwards us a sketch of what occurred during one of the recent battles:—"The sound of cannon suddenly aroused us to the knowledge that our army had met with the enemy, and that a battle had begun. We lost no time, but galloped our ambulance-waggons across the fields, and in about half an hour reached the battle-line. On the right was situated a great farm, somewhat isolated in position, and defended by some contiguous hills from fire. This we fixed upon. The buildings formed a square, one side of which was open and accessible to our waggons. In a brief time some rooms were set apart for operations. Our cases of instruments were opened, bandages and other appliances at hand, and our detachment was ready. The work of the sick-bearers now began. They were sent to pick up the wounded, accompanied by one surgeon, another being ordered to attend with us. After a few minutes the first patient was brought in with a bad comminuted fracture of the left thigh, rendering it necessary to perform amputation; this effected, the part was bandaged with lint, and carbolic acid applied to the stump. It ought to be remarked that in the Prussian ambulances and hospitals an oily solution of this acid (1 in 40) is used. The first case was speedily succeeded by others. We worked hard all day until the evening, five surgeons attending on 531 men, of whom 150 were badly wounded. We were told that during the first few hours the fire was particularly heavy, and our artillery suffered a great deal from that of the French, and the same was the case with the infantry. The projectiles of the chassepôt and the mitrailleuse reached an enormous distance. Among the 150 badly wounded, there were 8 fractures of the skull, 23 wounds of the chest, 56 fractures of the humerus, elbow, and forearm, and 43 fractures of the thighs and legs. The remaining 381 were chiefly flesh wounds in various parts, many of whom were able, of course, to walk to the next ambulance. The first cases received the most care, but when the wounded began to arrive in heaps we could only content ourselves with examining the wounds, extracting the balls, and by the adjustment of a bandage and dressing preparing the soldier for transport, to which end our well-fitted ambulance waggons were continually driving about; but they proved quite insufficient, and we were compelled to make use of the ordinary carriages filled with straw."

THE ADULTERATION OF FOOD.

THE question of the treatment that is due, and that in some places is even meted out, to the persons who deliberately adulterate food and drink, was brought before the Social Science Congress by Mr. Phillips Bevan, whose position as Editor of the *Food Journal* peculiarly qualifies him to stand between the public and the dealers by whom they are systematically plundered. Mr. Bevan conceived the idea that it would be useful to lay before his readers an account of the ways in which adulteration is practised, and also of the penalties with which it is visited in foreign countries; and he sought permission from the Foreign Office to address inquiries under Government sanction to the British Consuls and Vice-Consuls in all parts of the globe. The late Lord Clarendon not only assented to this request, but even did more than he was asked to do. He suggested that Mr. Bevan should frame his inquiries, and undertook that the Foreign Office should send them out, and should collect the replies. The lamented death of Lord Clarendon did not interrupt the work, to which Lord Granville has in turn given his cordial approval; and answers are now being received regularly, and the substance of them stated in the *Food Journal* month by month. If our grocers and brewers and bakers and dairymen peruse those answers, they will doubtless at first congratulate themselves on living in a country where adulteration finds shelter under the specious semblance of free trade. But we trust that any bliss of this kind will be only of brief duration; and that the knowledge that those who deal in adulterated articles are liable to severe penalties in nearly every country but our own, may make our legislators question the wisdom of their masterly inaction in times past, and prepare them to devise some means of remedying the evil for the future. Adulteration involves far more than any question of mere nastiness or depreciated value, although under these aspects alone it is a matter of no small moment. Mr. Bevan justly observes that the

argument is worthless which maintains that people bring adulteration on themselves by buying very cheap articles, so cheap that they cannot be genuine. In most cases the retail buyer has no notion of the wholesale value of genuine articles, and he therefore buys in ignorance. "No cheapness would tempt him," says Mr. Bevan, "if the seller were compelled to label his mixtures with the names of the ingredients—such as 'best butter, mixed with starch, mashed potatoes, and horse-bone oil'; 'coffee, with bread-crumbs, and sand'; 'tea, with iron filings'; 'sugar, with chromate of lead'; 'beer, with salt and cocculus indicus'; and the like." The matter may be carried even further than this. We have been lately staying at an hotel in which there was no pretence of cheapness, but in which the so-called food was simply poison. Every meal of which we partook there contained ingredients which passed rapidly into acrid decomposition, and occasioned most painful and depressing dyspepsia. It was very sad to reflect that an innkeeper, for the sake of three-halfpence (which we set as the possible profit on the adulteration in each transaction) should calmly and deliberately poison an unoffending fellow-creature, who had done him no harm, and against whom he could have had no possible malice. As far as we could discover by experiment, our sufferings were chiefly traceable to the articles that were respectively sold as coffee, soup, and sherry; and we are glad to record that the host did not profit by his practices, since, after two days' experience, we only slept in his house, and took our meals elsewhere. Against such practices individuals are powerless to protect themselves; and we heartily trust that Mr. Bevan's labours may in time procure for the public the protection of the law.

DIAGNOSIS OF INSANITY.

AN inquest was recently held at Louth, in Lincolnshire, on the body of an old man who had committed suicide, and the question was raised as to whether his mental condition for some time previously had not been such as would have justified the medical officer of the district in giving a certificate for sending the man to an asylum, whereby his death might have been averted. The coroner, however, took a proper view of the case, and pointed out that the penalties of the law were so severe for pronouncing a person insane without sufficient grounds, that a medical man was not justified in signing a certificate of lunacy without the most positive evidence of the fact.

AN ENGLISH AMBULANCE.

WE are informed that the National Committee of the International Aid Society have made an application to Mr. Cardwell for permission for twelve military surgeons to proceed to the seat of war, and that the request has been acceded to. The Committee have, moreover, determined to furnish from this country an ambulance fully equipped for ministering to all the requirements of 200 sick and wounded soldiers for a period of three weeks. In carrying out this object they have been aided by advice and information derived from the Army Medical Department, and there is reason to hope that Professor Longmore will be able personally to superintend the equipment of the ambulance, although, owing to the delicate state of that gentleman's health, it was at one time feared that he would not be able to undertake this duty. Twelve ambulance waggons, manufactured at the Royal Arsenal, Woolwich, and marked with a red cross and the words "Ambulance Anglaise," are ready for shipment to the seat of war, *viâ* Belgium. Professor Longmore will, it is hoped, be enabled to assume medical charge of the ambulance when complete in its *matériel* and *personnel*. One of the essentials in the medical officers forming part of the latter, is that they shall possess a thorough knowledge of French or German, or both. We wish this undertaking all the success that it deserves, but it strikes us that it has been entered upon rather late in the day. Whether the war continues or not, we scarcely anticipate that pitched battles will now form a prominent part of the campaign. Sieges, with occasional sorties, will take the place of actions in the open field. A medical staff that would be adequate for the requirements of a siege would be overwhelmed with work after such severe engagements as those we have all lately read about; and it is on these occasions that an ambulance with a well qualified staff of surgeons and hospital field equipment, becomes invaluable. Metz, however, is still holding out, and if it falls after a siege culminating in a grand attack, there will be no lack of work.

METROPOLITAN SANITARY REPORTS.

THE present season seems to be rather prolific in reports from the London medical officers of health, three of them at this moment claiming at least a passing notice from us. Statistics are evidently a weak point with the metropolitan health officers taken as a whole, there being, of course, occasional exceptions. We should like, for example, to see how the districts of St. George's Hanover-square, St. James Westminster, and Holborn, compare in the matter of infant mortality; but while one of these reports states that 44·5 per cent. of all the deaths last year occurred to children under five years of age, the other two reports are silent on the point. We use this simply as an illustration of an oft-repeated grievance of ours, that no endeavour is made to bring about a degree of uniformity in these reports, sufficient at any rate to admit of free comparison in essential statistical particulars. On general topics we may observe that Dr. Lankester appears to have been doing good service, not only to his own district but on a wider scale, in drawing up, for the popular information, hand-bills relative to small-pox and vaccination, and also upon the nature and means of preventing the spread of scarlet fever, typhoid fever, and infectious diseases generally. The most interesting feature of Dr. Aldis's report is that touching upon the operation of the Workshops Regulation Act, as to which he points out that the conflicting tendency of certain clauses renders prosecution sometimes difficult; one of the convictions obtained in St. George's under the Act was against the manager of a "model establishment superintended by a committee of ladies of rank." Dr. Gibbon reports an increase of seven deaths from congenital syphilis as compared with the previous year's return, and urges that the suppression of prostitution in our public streets would prevent a great amount of contagious venereal disease.

ACTION AGAINST A SURGEON.

AN ungrateful and uncalled-for action against Mr. William John Stott, of Haslingden, for alleged negligence and unskilfulness in the treatment of a very troublesome case of hæmorrhage of the palmar arch, is reported. Mr. Stott did not see the child till three days after the accident, when he found it impossible, from swelling and inflammation of the palm, to apply pressure enough to restrain the hæmorrhage. He flexed the arm, and so controlled the bleeding; applied a compress to the wound, and bandaged the arm and forearm. Mr. Stott impressed on the father the importance of securing a lodging nearer to his house; but in the evening received a message from the father to say that he need not see the case that evening, and that, as the hæmorrhage had not returned, he had made

up his mind to keep the boy at home. The hæmorrhage did not return. The little finger sloughed, and finally separated at the knuckle. Some erysipelas occurred in the arm, sloughs formed and then separated, and the parts healed. Mr. Stott paid about forty visits. Instead of being thanked for stopping the hæmorrhage, and saving the arm, he was called to defend himself in the above action. Numerous surgeons testified to the fitness of the treatment, and the jury at once returned a verdict for the defendant. We need scarcely offer our congratulations on the verdict to Mr. Stott. None of us are secure against such charges, though we ought to be. We can only rely on intelligent juries and brother practitioners perceiving that we merit very different treatment.

DR. RICHARDSON'S LECTURES ON EXPERIMENTAL AND PRACTICAL MEDICINE.

DR. RICHARDSON'S course of lectures on Experimental and Practical Medicine for the ensuing session will commence on Tuesday next, at 5 P.M. The lectures of this course will relate chiefly to therapeutical research, and will afford illustrations of the new method of studying the action of remedies by their elementary composition and physical qualities. The subject is one which combines, more than any other, physical science with practical medicine; and the lectures, although more especially addressed to the practitioner, might be followed with advantage by the advanced student.

A GOOD SAMARITAN.

WE learn from a Derby paper, *apropos* of the lamented death of Mr. W. S. Fearn, in Switzerland, of a good deed on the part of one medical man towards another, which deserves a word of record. Dr. Walker, an English physician, for many years resident in Milan, was spending his holiday in Bernina, and finding Mr. Fearn ill, devoted himself with unremitting care to do all that was possible to promote recovery, laying aside all considerations of the recreation he had gone to seek, and spending hours by the bedside of a professional brother of whom he had no previous knowledge. Such unexpected kindness softened greatly the regret of Mr. Fearn's friends that his last days should have been spent in a far-off land.

THE GENERAL HOSPITAL, BIRMINGHAM.

WE are informed that at the meeting of Governors of the General Hospital, Birmingham, held on the 21st September, a committee of seven governors was appointed to consider the notices of motion having reference to an enlargement of the medical and surgical staff, to which we recently referred. This committee is to report to an adjourned meeting of the governors on October 26th, when the rival schemes will be discussed and a definite vote taken.

A NOVEL EFFECT OF WAR.

THE Continental war is producing an effect in a quarter where it would hardly be looked for. The Registrar-General has for a long time been in the habit of publishing in his London Weekly Return the weekly mortality in the cities of Berlin and Paris; a few weeks ago he announced the suspension of the Berlin returns in consequence of the departure for the army head-quarters of the medical officer (Dr. Zuelzer) who supplied them; this week we are informed that "the usual return of deaths in Paris has not come to hand." The reported weekly deaths from small-pox in Paris were on the increase, and the general mortality was excessively high, when the continuity of the returns was broken. Humanity shudders at the bare possibility of so heavy a calamity as the prevalence of a disease like small-pox being superadded to the ordinarily grave difficulties of a besieged city.

CONSERVANCY OF THE THAMES.

AN important step has now been taken towards the ultimate purification of the Thames from sewage matter. The Twickenham Local Board have been informed by the Thames Conservators that effluent sewage water discharged into the river must not contain more than 3 gr. of suspended, and 70 gr. of soluble matter, nor more than 2¾ gr. of organic matter (2 gr. of carbon and ¾ gr. of nitrogen). This standard is to be universally adopted in the case of all towns and villages draining into the Thames.

YELLOW FEVER IN SPAIN.

THE outbreak of yellow fever at Barcelona has caused considerable alarm. There have already been about 1000 attacks and 350 deaths. The disease was supposed to have been imported into Barcelona by the Cuban steamer *Maria*. It was at first thought that the disease was not yellow fever, but relapsing fever. The fatality and rapid nature of the symptoms among those attacked have left no doubt, however, as to the nature of the disease.

THE Board of Trinity College, Dublin, have lately instituted a qualification in State or Preventive Medicine, which is intended to be of a high order, and is to be conferred, after examination, on candidates who have already graduated in Arts and taken the highest degree in Medicine. A document has been issued by the authorities of the University, recommending certain subjects of study, including Engineering, Pathology, Vital and Sanitary Statistics, Chemistry applied to the Arts, Meteorology, and Medical Jurisprudence.

THE *Pall Mall Gazette*, endorsing the remarks we made last week upon a Sidmouth correspondent's letter in reference to death-registration, suggests that the provisions of the Registration Act which affect everybody, more or less, should be in the hands of every householder. We believe the utmost ignorance prevails concerning this Act, but it would not so much matter about the ignorance of private individuals if those whose business it is to locally administer the law took the trouble to learn their duty.

DR. HOFFMEISTER has received her Majesty's commands to proceed to Darmstadt, with the view of being present at the approaching accouchement of her Royal Highness Princess Louis of Hesse. It is anticipated that this event will take place early in the present month.

ON Thursday last the new Act to provide for the equal distribution over the metropolis of a further portion of the charge for the relief of the poor came into operation. The maintenance of the in-door poor has now become a charge upon the Metropolitan Poor-law Act, 1867.

A HANDSOME crystal claret-cup, gold-mounted, has been presented to Mr. S. J. F. Stafford, surgeon to the Nottingham lodges of Odd Fellows at Yarmouth.

MR. J. DICKINSON, of Farncombe, has been elected chairman of the Surrey County Hospital, in the room of the late Viscount Midleton.

THE *Surrey County Times* states that the fever outbreak at Guildford has greatly subsided, few fresh cases being reported by any of the medical men.

AT the last meeting of the Liverpool Workhouse committee a further increase in the number of fever cases was reported. The number was 1104, against 954 in the previous week.

A BAZAAR in aid of the Norfolk and Norwich Hospital has been held with great success at that institution, the receipts amounting to £463.

THE high death-rate of young children in the town of Burslem has caused much anxiety to the local board, and it is understood that the matter will undergo investigation.

SMALL-POX is said to have broken out in the parishes of Atherington and Ilfracombe, within the Barnstable Union.

WAR NOTES.

THE amount of intelligence furnished by the daily journals becomes at the end of a week so enormous that it is impossible to condense it, or even to seize upon its more prominent features of interest to medical readers within the space at our disposal. Let us, however, take a few points, and only a few, of those which strike us as most noteworthy.

First, with regard to the number of medical men at the seat of war. We do not know what the case may be with the French army, for it has been so thoroughly disorganised that only a remnant of it now exists on the scene of warfare; but the Germans have no less than 2700 medical men with the troops in the field, and the *Militär-Wochenblatt* contradicts the reports as to the existence of any deficiency as far as they are concerned. The provision of medical officers in the Prussian service is at the rate of 1 to every 500, which ought to prove sufficient for ordinary purposes, and this staff has been vastly increased. The medical officers of the Prussian service are highly educated men. Their arrangements appear to have been excellent in all respects, and their system of medical and sanitary administration, nursing and transport, has proved capable of rapid extension under the exigencies of service. In addition to the medical officers with the armies of the two belligerents, there is a host of medical men of all nations—volunteers and others—in connexion with the different medical aid societies. Two hundred foreign surgeons have placed their services at the disposal of the German army; and the Russian surgeon, M. Pirogoff, of Sebastopol celebrity, has joined the staff of the International Aid Society at Basle. After a great battle, it would be quite impossible to meet the requirements of the wounded in the brief space of time at the disposal of attendants on the sick, however numerous; but when once this difficulty has been overcome, and the disabled have been gathered up and disposed of in different hospitals, more time is given for the play of medical arrangements and administration. A great many men, who have gone to the seat of war with the idea that their services would be in immediate and constant requisition, have found themselves grievously disappointed; and our correspondents assure us that some young and able surgeons have failed to find that scope for their labours which they had anticipated. The international societies have rendered vast services, and medical volunteers in connexion with those services have succeeded better than others in finding work. One of the obstacles in the way of Englishmen exists in the fact that a knowledge of both French and German is requisite in attending on the wounded composed of soldiers of both nations. A man requires to have at least a good colloquial knowledge of French to make his way with the men of that army, drawn from every department of the nation, and many of them speaking a provincial dialect or *patois*. Some of the German soldiers, we are told, object to be treated by doctors with whom they cannot converse; they miss the sympathy which naturally exists between them and their own officers or countrymen.

What appears to be wanted at the present time is a liberal supply of money, medical comforts, clothing, and drugs, such as chloroform, opium, chloral, and the like. Miss Garrett has, in our opinion, made two practical suggestions—viz., as to the desirability of establishing well-organised wayside kitchens on the various great high roads along which the soldiers pass; and the organisation of a staff of nurses and women to take charge of certain streets and districts, wherever the wounded are located in private dwellings and other places, with the view of visiting them and supervising their dietary and treatment, so that their wants in these respects may be attended to. The establishment of various depôts for the supply of useful articles, such as Mrs. Seacole's establishment afforded in the Crimea, would also be very expedient, especially if the medical officers and others in attendance on the sick were instructed where to forward their requisitions for articles of which they stood in need. A staff of people in connexion with such places could be employed in distributing these articles. For medical purposes in the field there is nothing handier than the medical field companion of our own army, as supplied by Messrs. Savory and Moore. It was De Quincy who remarked that if the stream of English charity was not a broad one, it flowed deep. Once let public sympathy be fairly aroused, however, and the stream is at once set in motion, and there is no limit to the flow of charity. The unparalleled horrors and extent of the present war have, at any rate, rendered the humanity of the age conspicuous in one direction. England feels the deepest sympathy for the sufferers, and about £200,000 has been already realised by subscription; but when we consider the extent of the misery, we may well stand abashed before it—for it is incalculable. When we attempt to realise what is to be the outcome of it all we are fairly lost in a maze of conjecture.

All countries have organised ambulances, and among them stands Italy. On the 29th of August an ambulance composed of medical men and students proceeded from Turin to Bâle, and made its way to Paris, but no news has since been received from it.

Central Europe threatens to assume the aspect of one vast hospital, for these institutions are springing up everywhere. In the district of Treves alone there are no less than forty-five hospitals, of which some have been opened by the committee of help to the wounded. There are altogether 2530 beds, of which 1537 are occupied. The war hospitals of Germany contain a total of 65,000 beds, 50,000 of which have been provided by the State, the remainder being due to the voluntary exertions of the charitable. Whilst this unhappy struggle continues, and long after it terminates, there will still be an immense amount of surgery and disease on hand in the shape of the secondary affections following gunshot wounds. Everything is now merged in the effort to maintain the struggle and to meet the demands of its victims, and whilst this continues we can scarcely hope for that exact and laborious scientific observation which shall add many new and improved methods of treatment to our stock of knowledge.

CITY OF GLASGOW FEVER HOSPITAL.*

THE Report, lately published, of this hospital, by the physician-superintendent, Dr. James B. Russell, besides furnishing us with the information usually met with in such documents, touches on several interesting and practical points. The hospital has been in existence for five years, and during the year ending April 30th last, almost double the highest number of cases in any previous year have been treated; and another feature in a year remarkable in the history of epidemic disease is the admission of cases of relapsing fever into its wards. Besides the transformation of a range of uncompleted brick buildings, belonging to the directors of the Royal Infirmary, into fever wards for 35 beds, at a cost of £375, the Board erected a new pavilion containing 34 beds. This is divided into two wards entirely

* Report of the City of Glasgow Fever Hospital, from May 1st, 1869, to April 30th, 1870.

separate from one another, having each two apartments—a large one with 11 beds for the cases while acutely ill, and a small one with 6 beds for convalescents. Advantage was taken of the experience of the other pavilions. The cubic and area space per bed in the ward for acute cases has been increased, with the addition of certain arrangements to ensure the perfect disinfection of all excreta. Altogether, the new pavilion is reported by Dr. John Russell to be as nearly as possible a model of a hospital for the treatment of infectious diseases, ensuring the maximum of comfort to the patient and the minimum of danger to the attendants and other inmates of the institution. Dr. Russell makes some remarks on the "unification of the interests which deal with fever." He thinks it will be necessary, in order to give the hands of the Sanitary Department free command over infectious diseases, that they shall undertake the hospital treatment of them entirely. The *prevention* of disease is the special province of the local authority; its treatment may devolve upon various public bodies and institutions. The latter receive a person suffering from fever for his individual good solely. On the other hand, when the local authorities treat a person suffering from fever, it is because the patient has a "contagious" disease, and comes within the meaning, if not the definition, of the term "nuisance;" they do so for the public good solely. It is quite possible to treat contagious disease in the most perfect way, so far as the sick individual is concerned, and yet fall short of full precautionary measures for the prevention of its spread. In illustration Dr. Russell cites the suggestion recently made to the Board of Police by the Directors of the Royal Infirmary regarding a convalescent home for small-pox patients. The duty of directors to a person suffering from small-pox is finished when he has recovered sufficiently to be discharged without injury to his own health; but their duty as custodiers of the patient is not discharged to the public so long as it is dangerous to the public that he should be let loose among them. Then comes the question as to who is to determine the time that a patient is to be retained; and, as such detention necessarily involves financial considerations, it might fairly be asked whether the expense incurred solely for the public good should not fall upon the local authority?

Of 2230 admissions during the year under report, 2023 were cases of typhus, 77 of enteric fever, 19 of relapsing fever, 12 of scarlet fever, 1 of small-pox, 2 of measles, 19 of febricula, and 77 of other diseases.

The mortality from typhus was 13·7 per cent.; the average residence of those who recovered was 23·6 days; of those who died, rather more than 6 days; and over all cases, 21¼ days. In speaking of the period at which a convalescent ceases to be infectious, Dr. Russell thinks that material substances, such as clothing, &c., are more frequently the vehicles of contagion than the person of a fever convalescent who has been walking about the hospital grounds for ten days, and discharged after having been thoroughly washed. Considerations as to the latent period of typhus will generally enable us to trace whether cases of fever, arising where convalescents have returned home, can be ascribed or not to those convalescents. The remarks on the individual susceptibility to typhus are worth reading. Dr. Russell, from the experience which the staff of the Fever Hospital unfortunately provides, endeavours to trace the variations in this respect. As a contrast to the experience of typhus in the City Fever Hospital, he says that no case of enteric fever has ever arisen, either among the staff or the patients beside whom cases of enteric fever are treated. Of enteric fever 77 cases were admitted, with a mortality of 6·4 per cent. The average residence of those who recovered was 45 days, and of those who died 11·6 days. The cases were for the most part sporadic, and scattered over thirty-six of the seventy-four sanitary districts. Enteric fever means, according to Dr. Murchison, "bad drainage, and bad drinking water." As Glasgow is above suspicion in the latter respect, we must look to bad drainage for an explanation of the local proclivities. The two districts from which the maximum number of cases were admitted are the districts which always head the list. Dr. Russell's experience concerning relapsing fever does not differ from that of other observers. It is probable that the first cases contracted the disease in Edinburgh. He points out that most of the fresh centres of infection have been associated with the reception of lodgers; and that, once introduced in this way into a family, this fever seemed to seize all its members with a rapidity and certainty which typhus rarely exhibits. In no case have the two fevers been associated, or in any way commingled. Nineteen cases of relapsing fever were admitted, of which only one—an old man of seventy—died. The average residence was 28 days. The ultimate development of this fever in Glasgow remains to be seen. Up to the 25th July it had been steadily increasing; but Dr. Russell anticipates that relapsing fever will not assume alarming proportions in Glasgow.

THE ROYAL ALBERT ASYLUM FOR IDIOTS.

IN June, 1868, we noticed the laying of the first stone of this valuable institution at Lancaster, and we have now to report the opening of the first part of the new building, the formal inauguration of the complete institution being expected to take place under royal patronage in 1872.

It is proposed to gather under the protection of the Royal Albert Asylum at least a portion of the poor idiots and imbeciles to be found in the seven northern counties of England,—Lancashire, Yorkshire, Cheshire, Westmorland, Cumberland, Durham, and Northumberland. The movement is to that extent local; but it is none the less commendable, when it is remembered that no provision whatever exists in the north of England for this unfortunate class. It is estimated that there are 14,000 weak-minded persons in the seven counties included in the operations of this asylum, and no provision previously existed for their treatment or training. Does not this fact prove the necessity for the establishment of the Royal Albert Asylum?

The style of architecture is Gothic, the arrangement of details being so contrived as to meet modern tastes and ideas of sound sanitary principles. The Committee have been fortunate in the selection of a site. Standing on an eminence said to be 150 feet above the level of the sea, the Asylum forms a very prominent object of interest from whatever point of the wide expanse it may be viewed. The building is of light-coloured freestone, of that durable quality so plentiful in the neighbourhood. The inside walls are lined with brick, a small space being reserved between the brick and stone. By the adoption of this plan the interior of the building will be kept dry and warm, and will be much less susceptible to the changeable temperature which is so characteristic a feature of the climate of this country.

Only such persons will be admitted as are capable of improvement. The asylum is not intended for epileptic, paralytic, or insane persons, nor for those who are incurably hydrocephalic. Idiocy complicated with blindness or deafness will also be a disqualification. There will be two classes of patients of both sexes admitted when the building is opened—free patients and paying patients. The first-named are those whose friends cannot afford to meet the lowest scale of payment, and they are elected by the votes of the subscribers. The second are to be admitted by the Central Committee without limit as to time. Patients admitted free, or at the reduced scale of payment, must belong to one of the seven northern counties, but that regulation does not apply to the full rates of payment.

The Committee have been fortunate enough to secure the services of Dr. Shuttleworth, late assistant medical officer of the Earlswood Asylum, as their resident superintendent, and also those of Miss Bryan, who was sub-matron at Earlswood for nine years, as their matron. The institution owes its existence to the untiring efforts of a member of the medical profession, Dr. De Vitré, of Lancaster, whose name will be identified with it as that of Dr. Reed is with Earlswood.

The opening ceremony on the 14th September, under the presidency of the Duke of Devonshire, supported by the Bishop of Manchester, and other local notabilities, proved a great success; and we shall hope in due time to record an equally satisfactory completion of the entire building.

Correspondence.

"Audi alteram partem."

REPRESENTATION OF THE ROYAL COLLEGE OF SURGEONS IN THE GENERAL MEDICAL COUNCIL.

To the Editor of THE LANCET.

SIR,—I beg that you will allow me to appeal through your columns to those Fellows and Members of the Royal College of Surgeons of England who desire to assert the right of the Corporation to elect a representative in the General Medical Council under the Medical Act of 1858. Whatever improved modes of representation of the profession may be contemplated in drafts of future Bills, we have nothing to do with them at present. Our right to elect a representative exists in the opinion of the lawyers who have been consulted; and it rests now with the Corporation to show whether it values that right sufficiently to contest it in a court of law.

The necessary proceedings to bring about a legal decision as to whether the Corporation or the Council is entitled to elect should be commenced in November, and we ought to have £150 in hand. Dr. Morris, F.R.C.S., of Spalding, who has already shown his energy in the cause of reform at the College of Surgeons, has consented to act as Treasurer to the fund; and an account in our joint names will be opened at the Western Branch of the Bank of England, Burlington-gardens, where subscriptions, limited to one guinea, may be paid to the "College of Surgeons Representation Fund." Dr. Morris or myself will be glad to receive contributions in any form, and to any amount up to a guinea; and we do not propose to expend money in advertising the names of contributors, but shall simply publish a balance-sheet when the object of the fund has been accomplished. Trusting that those gentlemen who exerted themselves to obtain signatures to the memorial by which the original meeting of the Fellows and Members was brought about will now be kind enough to solicit subscriptions in the cause,

I am, Sir, yours obediently,

CHRISTOPHER HEATH, F.R.C.S.

9, Cavendish-place, W., Sept. 28th, 1870.

CASE OF PARAPLEGIA.—IMPORTANT MEDICAL AND ETHICAL QUESTIONS.

To the Editor of THE LANCET.

SIR,—I was called upon by an Accident Assurance Association, through their agent, to see a claimant who had met with an accident, but did not see him alive. I was then requested to see the surgeon, and make inquiries of him, and also see the body. But before I had made any report, the Secretary, as soon as informed of the death, ordered the agent to apply for an inquest and post-mortem to be made by an independent surgeon.

The coroner issued his warrant for an inquest, and requested his brother to make a post-mortem the following day, which was done; but no information was forwarded to me, although the family surgeon was present, and he knew that I represented the Company. On this occasion, as also on a former, in November last, when a claim was made, I was requested to make inquiries, and see the claimant. The only intimation I had was from the agent that an inquest would be held at eleven o'clock, and that I was to obtain the services of another surgeon to be present with me.

On arriving I was much surprised to find the post-mortem concluded; and on the part of the Company we had to re-open the body, which was originally in a decomposed state. The viscera were all dissected and displaced, the portion of spine in the lumbar region taken out, and the cord examined, so that we could come to no definite opinion but from what we heard in evidence, that there was a "clot of blood" pressing on the cord, and that the verdict was "spinal apoplexy."

I would therefore ask you whether, in common courtesy, if not in the interest of justice, I should not have been present, or at least have been apprised of the post-mortem.

The case was the following:—A farmer falls out of his cart upon his back. Perfect paraplegia and concomitant symptoms result, with the right arm also affected, and some pain about the shoulders. He was not seen by a surgeon until the fourth day, consequently no remedies were applied. But on that day, or the day after, a water cushion was used. On the ninth day another surgeon saw him in consultation, and on the tenth day he died, and it was stated that "had he been seen on the day of the accident even, no remedial measures would have been adopted."

I would ask, Is it possible that the profession is so utterly helpless in these cases? Can no palliative, to say nothing of curative treatment, be applied?

I should be glad of the opinion of yourself and readers on the treatment of cases of injury to the back from falls, &c., and as to the proper course in similar inquiries with reference to attendance at post-mortem examinations.

I am, Sir, your obedient servant,

THOMAS EDIS.

*** Supposing that the surgeon who made the post-mortem examination really knew that our correspondent represented the Accidental Insurance Company, he should at once, in justice and courtesy, have informed him of the time of the post-mortem examination, and invited him to be present. The fine point of the case, upon which it was most natural that our correspondent should wish to be satisfied, is this—was the apoplexy of the spine caused by the fall, or was the fall the effect of the apoplexy? It was impossible to form any accurate opinion on this point from the second post-mortem examination, for the parts affected had all been removed. We can hardly understand one surgeon making an important post-mortem examination like this without informing a brother surgeon whom he knows to be officially, as well as professionally, interested in the facts. The case is one of great interest, and under the circumstances it was the duty of the surgeon making the post-mortem examination to court the presence of Mr. Edis.—ED. L.

NAVAL MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—In your leader of Sept. 17th you have entered on the discussion of the causes, and you have stated some of the "cons," that affect the popularity of the Naval Medical Service.

I am sure that the grounds of Johnson's definition of a ship as a "prison with a chance of being drowned" is far more effective in deterring from the navy than the recitals of Smollett, which, now-a-days, are sources of merriment only.

It is a difficult task to render sea service palatable to any one of professional age, and no young man who can see his way clear to land service will ever voluntarily take to the sea. It is absolutely necessary that higher inducements should be offered by the one than by the other service to induce men to enter and to retain them. The reverse, however, is the case. Besides enjoying superior comforts through life, with chances of higher emolument in India, the army doctor has much greater chances than the naval of reaching the inspectorial grades, and of retiring ultimately on a respectable emolument after a career in which half-pay and lost time are to him unknown.

We see that with us in the navy an officer approaching thirty years' service may be treated in the humiliating manner lately exhibited at the Greenwich Hospital Schools, by the appointment, on a twofold salary, of a young civilian officer to supersede him; or an officer after twenty years' standing, with good repute as a hospital surgeon, and with scientific acquirements that have given him the F.R.S., may be sent to serve again in a ship; that after long hospital service in yellow-fever climes, a surgeon may find his claims to a similar home appointment ignored; or, being sent to the charge of one of the most distant hospitals

in the world, a surgeon may find his office suddenly abolished, himself appointed to a ship on the station, and the expenses of sending home his family thrown on his own purse. We know, too, that in seniority promotions of assistant-surgeons, good officers may be omitted without reason being assigned; and that after our service as surgeons ceases we cannot obtain so good a retirement as chaplains and paymasters.

Facts like these disgust the profession in the navy, and are made known to the schools. Hence arises the shyness of young men to enter a service where they have no prospects of advancement like those in the Army or Indian services, and where they can depend only on one thing with certainty, and that is on being treated illiberally from first to last.

As THE LANCET has always been the naval surgeons' friend, and still expresses a desire to advocate the cause of the profession in the navy, I trust you will give this a space, and oblige

Your constant reader,

Sept., 1870. HALF-PAY.

PHARMACY AND MEDICAL PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—In reference to the remedy for the evils referred to by "Reformer" in his letter to THE LANCET of the 17th September, 1870, I would suggest a twofold view of the "position."

1. *Professional aspect.*—Practitioners prescribe and do not dispense, either finding it inconvenient or *infra dig.* to do so; or they wish "fair play" towards the chemists.

2. *Pharmaceutical aspect.*—Chemists dispense to earn an especial livelihood, for which they are specially qualified by education to seek, and they do so, moreover, to relieve medical prescribers of the loss of time and inconvenience dispensing necessitates. The chemists, as such, are not qualified by education or legal right to practise medicine, surgery, or midwifery, and heads of firms should realise this fact themselves, and enforce it upon those they employ; while medical men should look to it that their patients become acquainted with this truth.

The confusion and false dealing which at present exist have no doubt arisen from practitioners and chemists having acted wrongly each towards the other. It will do us both good to acknowledge this.

The medical man, hoping to make a larger income by dispensing for his patients, and by keeping them unacquainted with the nature of the remedies he employs, has thus withdrawn a large share of legitimate income from the chemist; who, perhaps for years, has held as customers patients of a prescribing physician or surgeon, until the new "dispensing" doctor attended. The natural result of this is, that the chemist takes the matter into his own hands and prescribes, so long as there is no responsibility attached to the case, and dispenses as well.

Now, the *remedy* appears to me to rest with those who unfortunately at the present time oppose each other.

1. *Professional aspect.*—Let medical men only dispense in emergencies, and let them only recommend those chemists who act fairly towards them; moreover, never to hesitate to tell their patients not to ask advice of any chemist.

2. *Pharmaceutical aspect.*—Let chemists undertake never to prescribe; in common fairness let them recommend any person who may ask them for advice to those medical men who they know do not dispense; moreover, let the chemists enforce as a rule upon their own conduct, and that of their assistants, never to recommend any medical man in particular, but to keep and show, when solicited, a list of practitioners' names, and leave the patients to choose for themselves.

Chemists should have a lower scale of charges for patients of solely prescribing practitioners than for ordinary customers. By exercising an impartial and desirable, because upright, plan of this kind, chemists would retain the respect and recommendation of medical men; in return, their recommendation would enable prescribers each to get a share of a large number of patients who, at the present time, never seek real professional advice.

Let us each and all remember that what is right is right, and do it; and whatever is wrong is wrong, and avoid it.

I am, Sir, your obedient servant,

Sept. 23rd, 1870. A PRESCRIBER.

To the Editor of THE LANCET.

SIR,—There can be no question that the members of the medical profession have just cause of complaint against the deficiency in the law which allows prescribing by druggists to go on; but I cannot help thinking that the only sure way to stop it is not for medical men to dispense their own drugs, but for them to give up doing so except in places where no druggist can be found.

If the public did not consult the druggist, the druggist could not prescribe. If the distinction between the qualified medical practitioner and the druggist were clearer, the public would soon learn the difference between the mere tradesman, who sells medicines, and the educated practitioner to whom their lives are to be entrusted; and in the course of time they would as soon think of going to any other tradesman as to a druggist, when requiring professional skill and attention.

Of course the reform would be the work of time, but it would surely come; and by upholding the dignity of their profession by placing it above a mere trade, medical men would not only gain in respect, but in pocket as well.

I am, Sir, your obedient servant,

Sept. 27th, 1880. ANOTHER REFORMER.

To the Editor of THE LANCET.

SIR,—A letter in your journal of the 17th inst., signed "Reformer," I believe will be hailed with sincere joy by all general practitioners. The grand way in which the druggists take upon themselves to prescribe, and even medically dictate to those who apply to them, is unparalleled for self-assuming medical and surgical knowledge. Last summer I was visiting a patient in a large suburb of town, and, wishing to write a prescription, I called at the shop of a chemist so to do. He politely requested me to take a seat, while he was busily engaged prescribing for an infantile case of pneumonia. When the mother had received his instructions and medicine I mentioned to him that I thought the child was very ill. "Oh, yes," he replied, "she brought the child here yesterday, and I sent her to a surgeon. Now you see, sir," said the prescribing chemist, "if anything happens, he will give a death certificate." I said I thought it was rather odd, under the circumstances, that she should again bring the child to him. "Oh no, sir," this wonderful chemist replied, "all the doctors round here are nothing but a pack of duffers, and all the people here know that." Hearing this, I determined not to write my prescription with such a common detractor of character, but left the shop, leaving him to wonder who I was and what I wanted. Now, Sir, I have since had many opportunities of calling at different chemists, and I find them all ready to defame the general practitioner, only in more polite language. Let every surgeon have his own dispensing surgery, and avoid sending prescriptions to the chemist, is my suggestion.

I am, Sir, your obedient servant,

Kennington, Sept. 19th, 1870. A GENERAL PRACTITIONER.

To the Editor of THE LANCET.

SIR,—I was much interested in your remarks of last Saturday respecting doctors dispensing their own medicines. I have had many years' experience of that kind of thing with various medical gentlemen, and can say that your remarks are true only with respect to the West-end of town, and quite untrue with respect to the country, where there are the most chemists and more doctors.

I can assure you that instead of costing the patient, as you say, 3s. per day, it would not average 1s. 6d., and by arrangement could be done at 1s. With respect to our being paid immediately, that is true only in London. In country towns we wait from one to two years for payment. Feeling pulses over the counter sounds like a good joke; I never heard of it.

Again, dispensing medicines never can teach a man to prescribe. A few fools may think they have learnt in this way.

If medical gentlemen say that they are too poor to give up trade, we have no more to say; but that must be the only excuse. This was the only plea set up by the *Medical Times* some time ago when writing on the subject.

I remain, Sir, your obedient servant,

Star-hill, Rochester, Sept. 21st, 1870. H. BARNABY.

"HOSPITAL SUNDAY" IN ST. MARYLEBONE.

To the Editor of THE LANCET.

SIR,—We shall feel obliged if you will permit us to remind the practitioners of St. Marylebone of the adjourned meeting to promote the above object, which is to be held here on Thursday, October 6th, at 8 P.M. Being desirous to avoid the evils which you have pointed out in an annotation last week, as the result of want of publicity in a similar movement elsewhere, we caused an invitation to be sent to the staff of each hospital and dispensary in the parish of St. Marylebone, previous to our first meeting, asking them to send representatives to it; and we now desire to state, through your columns, that we shall be glad to see present on Thursday evening, not only the members of the various staffs, but also any of our professional brethren in St. Marylebone who may be able and willing to assist us by their counsel, or by their influence with the clergy of various denominations. It is intended to apply for collections to Episcopalians, Dissenters, Roman Catholics, and Jews; and we believe there are few medical men in practice who cannot assist us by influencing some of these. With reference to the distribution of the funds, too, we think it desirable that any committee which may be formed should have some members unconnected with either hospital or dispensary, and therefore uninfluenced by the feeling of partiality which one naturally entertains towards the institution with which he is himself connected. We therefore hope there will be a good attendance of the profession at the meeting.

We are, Sir, your obedient servants,

T. DANE,
Surgeon Western Ophth. Hosp.

H. NELSON HARDY,
Medical Officer in Ordinary,
St. Marylebone Provident Dispensary.

Western Ophthalmic Hospital, 155, Marylebone-road.
September 28th, 1870.

THE BATTLE OF THE 18TH AUGUST.

(FROM A CORRESPONDENT.)

ON the afternoon of the 18th of August, from all the Church towers around about there appeared white flags marked with a red cross. This was the sign that twenty-five ambulances had been established, comprising those of the Prussian, Hessian, and Saxon armies. We, the members of the five ambulances of the Garde Corps, selected for our settlement a little village, Fouaville, quite close to the battle-field and the first lines of surgical aid. Our first object was to procure the best rooms for our hospital; and as a castle or other great building was wanting, we were compelled to take possession of three structures—the church, the schoolhouse, and the house of the Maire, containing four large rooms and a connecting barn. This done, our waggons were unpacked, and we prepared layers for the wounded, made of straw mattresses and pillows; but scarcely had we commenced than we were surprised by a train of wounded. It was therefore quite impossible to continue our preparations, and we satisfied ourselves by simply spreading straw over the floor. I had under my care the schoolhouse. In a few minutes the rooms were filled by fifty patients. Nor was this all, for other wounded kept on arriving, for whom we could do nothing beyond restoring the bandages or furnishing them with new ones. The schoolhouse contained the schoolroom below, and three small rooms on the upper story. All the soldiers that were less seriously wounded were attended to, and transferred without delay to the next hospital in reserve. The injuries of the greater number of the fifty seriously wounded were inflicted by chassepôt projectiles or by shells. There were five fractures of the arm, nine of the thigh, thirteen of the legs, four of the jaw-bone, three shot through the lungs, and one shot through the mouth and back of throat. The remainder were flesh wounds of different parts of the body. In the case of those wounded in the lung, the projectiles had often taken a remarkable path—in one case through an arm and armpit—before hitting the chest. There was no emphysema in this case, but in another example the wounded man was swollen and puffed up like the frog in the fable, and if you pressed the chest you could hear the air whistling through the wound.

The other surgeons of our hospital found themselves in the same state as myself. All the disposable rooms of the different buildings were soon filled. Our administrative officer had in the meanwhile established a large cook-house—for the patients must also be fed,—and he managed to furnish a supper for 400 persons, that being the sum total of our patients. Our hospitals are fitted up for only 200 persons. We had a very hard day's work, and went to bed thoroughly exhausted. The next morning we had to amend our condition if possible, and this we did by sending from the hospitals every patient able to bear the transport. We got a train of waggons and succeeded in sending away 150 men. This was of great advantage to the remaining patients as well as to ourselves; they got purer air and more of it, and we were able to attend to them all twice a day. Besides, we had to perform all the necessary operations on the same day. There were two poor boys with comminuted fracture of the upper arm, and one with destruction of the left knee-joint. The other cases were operated upon on the field of battle. The best room for the purpose proved to be the sacristy, for there was a large solid table, and with good water-supply near. We proceeded to prepare all our operations, while our administrator had during this time taken upon himself the charge of providing beds. For this purpose he took the seats and boarding about the school and church, and our soldiers set to work to construct the beds as best they could. They were very slight, and the straw mattress and pillow a little hard perhaps; but they did very well, and it was impossible to procure better. The following evening fifty wounded men found themselves in such beds, and it became easy to attend to the fractures. We employed gypsum, and temporary expedients for putting them up, such as wire arms, trowsers, &c., and by the fourth day we had put up fifty fractures in a solid, substantial fashion with gypsum. All the wounds were in a good state, without abundant suppuration and free from gangrene. We could detect the smell of the contaminated air of the neighbouring battle-field, but the plentiful supply of fresh air appeared to have averted any of its evil effects. From this time we began to get rid of our patients by sending them to the nearest railway station. We were compelled to do this in consequence of our supplies becoming gradually exhausted. The village itself was of too poor a character to afford supplies, and our hospital was too far removed from the depôts of our societies for aid to wounded in war to receive any. The wounded were always, as we were aware, well attended to at the railway stations, and I found this to be the case when I accompanied thirty waggons of wounded. Having made arrangements for the transport, I then set out, and continued till evening, when we reached a town where a large reserve hospital had been established. There we left those who could not bear further transport, and having refreshed and rested the remainder, we again set out until we reached the railway station at Rémilly.

I was much gratified with the arrangements made at Rémilly for the reception of the sick and wounded. There was a sufficient number of surgeons, dressers, and others charged with the care of the disabled soldiers. The railway trains arrived and started regularly, and the waggons were well fitted. The supply of provisions was also good; and coffee, tea, wine, bouillon, meat, bread, and biscuit were given to every wounded man. All were quickly attended to, and their surgical dressings changed. More than five hundred wounded men arrived daily, all of whom had to be

prepared for railway transport, or lodged in the great hospitals of the town. You will not deem these numbers exaggerated when you remember that this is the nearest station to the scene of the bloody battles of the 14th, 16th, and 18th of August, that it naturally formed the rendezvous for the wounded; it was moreover, at the time, the only communication with our base. More than 1000 waggons were utilised for the transport of the wounded, on mattresses, stretchers, or straw, and none of the arriving goods trains returned without conveying its burden of wounded.

Our hospital was not long established, for after ten days we were ordered to set out elsewhere, having transferred the remnant of wounded to the charge of other establishments. During that time we attended altogether 420 wounded, of which number we lost 5 by death (3 by wounds of the lung, and 2 of the cranium); 375 were disposed of by sick transport; and the remainder (30) were transferred to the care of other surgeons. The general health of all our wounded was good, and the condition and progress of the wounds up to the last moment that I saw them were most satisfactory; and I am assured that similar results were obtained in other hospitals. We made considerable use of carbolic acid, and the ventilation was rendered as free and perfect as possible. The evacuation of a locality where surgical cases of this nature have been treated, at the end of a short period, is also a practice of great wisdom. I may add that the health of our army generally is infinitely better than any of us could have hoped under the circumstances. In spite of all the long and wearying marches, the many battles, and the bad quality or insufficient quantity of provisions; in spite of bivouacks night after night, and sometimes under rain and storm, we have had no sickness of importance, beyond the occasional prevalence of slight diarrhœa. There has been no dysentery, typhoid fever, or any other epidemic disease. Heaven has preserved our army against such disasters; it has suffered enough from French projectiles.

Obituary.

AUGUSTUS WALLER, M.D., F.R.S.

WE lament to have to announce the death of Dr. Augustus Waller, F.R.S., which took place at Geneva, on September 18th.

Most of our readers are aware that Dr. Waller held a high place among experimental physiologists. He is best known for his valuable contributions to the physiology of the nervous system, and especially for the introduction of a new method of investigation, applicable to various important objects of inquiry relating to the structure and function of the nerves, both in health and disease. To Dr. Waller we also owe valuable original observations on various other physiological questions.

As a reward of his scientific labours he twice received the Monthyon Prize of the French Academy of Sciences; first in 1852 in association with Professor Budge, of Bonn, and again in 1856 for experiments, exclusively his own, which discovered an important relation subsisting between the nutrition of nerve-fibres and their connexion with nervous centres. The Royal Society also awarded him one of the Royal Medals for 1860, for these and his other researches in experimental physiology.

Dr. Waller began professional life as a general practitioner in Kensington, but he subsequently devoted himself entirely to original scientific inquiry, and, excepting for a short time that he held the appointment of Professor of Physiology in Queen's College, Birmingham, he resided abroad, and enjoyed the companionship of the most eminent continental physiologists, by whom his merits were fully recognised. At the time of his death he was resident in Geneva, where he had begun to practise as a physician, but without abandoning his physiological pursuits. His death was quite sudden, from an attack of angina pectoris, to which affection he had been some time subject. There had been some slight previous warning of the access of a fit, but not such as to cause alarm to his kind friends, Drs. Julliard and Prevost, who were in attendance upon him.

Medical News.

APOTHECARIES' HALL. — The following gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on Sept. 22nd:—

Huggins, Samuel Tillcott, Banbury.

At the preliminary examination in Arts held at the Hall on the 23rd and 24th of September 107 candidates presented themselves, of whom 38 were rejected, and the following 69 passed and received certificates of proficiency in general education:—

FIRST CLASS (order of merit).—1. Robert John Price. 2. Fredk. Worrell Friend and Harold M. Powell. 3. Richard Randell and William Oram. 4. Jas. Arthur Hardy, Edw. John Henderson, and A. Stanford Morton. 5. George Black Butter and Robert William Collet. 6. Harvey Gosset Brown, Francis Arthur Hallsworth, Ernest Carr Jackson, Robt. Bickersteth Miller, and Howard Douglas Stewart. 7. Edward William Lane. 8. Beresford Robert Bullen.

SECOND CLASS (alphabetical order).—John Alexander Aitkens, John Davis Allen, James Scott Battams, Chas. Scot Bayley, Samuel Benton, James Black, Percy C. Boyd, Reuben Aug. Louis Bynoe, Robert Cobb, Edward Cheyne, William Theobald Blanton Clark, Harcourt Coates, Augustine Dennis, Charles Augustus E. A. Field, Charles Harris Franklin, Robert W. Greenish, Cecil Niel Griffiths, Henry Edward Groves, William Guy, Frederick S. Hardwick, George Hastings, Frederick Dell Hayman, Wm. John Healop, Francis E. C. Hood, Thos. Henry Hopcroft, Jas. William Hope, Joseph Hopkins, Welby l'Anson, Michael Lewis Jarrett, Edward Mackenzie Laughlin, Patrick James McDonogh, John Mackenzie, Jonathan Macready, Reginald Maples, Geo. Edward Miles, Henry C. Noott, Reginald Norman, Charles J. C. Otway, Wm. James Outhwaite, George Roger Parker, Charles F. Pickering, Thos. J. Robillaird, Henry Sawyer, Arthur Tom Scatliffe, Herbert Smalley, Winckworth T. Smith, J. Fred. J. Sykes, Thomas Henry Stephens, Charles Vernon Taylor, John Henry Vinter, Wm. Fred. Walker, Edw. Sadler Warrillow, and Robert Wharry.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The annual report of the receipts and expenditure of the Royal College of Surgeons from Midsummer day, 1869, to Midsummer day, 1870, has just been published, from which it appears that the former amounted to £12,453 7s. 1d., from the following sources—viz., Court of Examiners, £9871 12s.; fees on election to the fellowship, £147; fees on election into Council, £42; sale of Synopsis and College Calendar, £15 11s. 9d.; dividends on stock (£34,000) £1057 10s.; rent of chambers in Lincoln's-inn-fields, £936 10s.; trust funds, &c., £383 2s. 10d.; making a total of £12,453 7s. 1d. The disbursements during the same period amounted to £11,986 9s. 6d., and may be divided under the following heads:—College department: Fees to Council, Court of Examiners, College of Preceptors, auditors, diploma stamps, salaries, wages, coals, gas, &c., £7328 7s. 9d. Museum department: Specimens, spirit preparation glasses and bottles, printing lectures, salaries, wages, &c., £2511 18s. 1d. Library department, including purchase and binding of books, salary, &c., £628 2s. 9d. Miscellaneous, including taxes, rates, insurance, law expenses, College Calendar, alterations, repairs and painting, &c., £1518 0s. 11d. Total, £11,986 9s. 6d.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.—At a meeting of this Association, held on the 21st September, the following resolution with reference to a recent action against Dr. Stott, of Haslingden, was unanimously adopted:—"That this Association has heard with much regret of the recent action against Dr. Stott, of Haslingden, for alleged malpractice, and expresses its sympathy with that gentleman for the trouble and annoyance which, in spite of a verdict in his favour, he must have incurred, seeing that, in the opinion of this Association, the treatment pursued was most skilful and scientific."

THE PARIS MEDICAL PAPERS.—Several of these have ceased to appear. We have, however, received *L'Union Médicale* up to September 17th, but not since. The editor has stated that the journal will be published in Paris as heretofore, for the benefit of the medical men beleaguered in the French capital.

ANIMAL AND HUMAN VACCINATION.—Even in Italy, where animal vaccination took its rise, opinion is not quite settled as to the respective merits of these two kinds of vaccination. As a proof of this, it may be mentioned that a premium of £20 is offered by the president of the Institute of Lombardy for the best essay on the subject. Facts and reasoning are to be brought forward by the author to show which mode should be preferred; and in case he incline to animal vaccination, he is to point out in what manner it may best be carried out.

THE LATE SIR HUMPHRY DAVY.—A statue of the late Sir Humphry Davy is about to be erected at Penzance. It will be of Sicilian marble. Messrs. Wills, of Euston-road, London, have been commissioned to execute the work.

THE WOUNDED IN PARIS.—The wines and provisions which were found in the Imperial palaces have been given over to a committee who will distribute them to the numerous flying hospitals organised in the capital. Mansions, schools, theatres, and large shops are being transformed into temporary hospitals.

DR. D. ROSS MOORE, of Draperstown, has been placed on the Commission of the Peace for the county of Londonderry.

LUNG DISTEMPER.—This infectious and virulent malady, which we lately noticed as prevailing in several parts of Ireland, has broken out close to Dublin, and several farms have already been attacked. Among the rest, it has occurred at Enniskerry, near Dublin, on farms belonging to the Marquis of Powerscourt, and several cases have resulted fatally. Mr. Fergusson, veterinary surgeon to the Government, is at present investigating the outbreak.

GERMAN VOLUNTEERS.—The "Allg. Med. Cent. Zeit." of September 17th says that the Friedrich Wilhelm University of Berlin has sent no less than 1500 volunteers to the army, the medical faculty being particularly strong. Among the latter are several professors, as Langenbeck, Bardeleben, Rosenthal, &c.

CASTLECONNELL DISPENSARY. — Dr. Porter, the medical officer of Castleconnell Dispensary, having been summarily dismissed by a sealed order of the Poor-law Commissioners, and an investigation of the matter denied, Dr. O'Sullivan, one of the guardians of the Limerick Union, has handed in the following order of motion:—"I will move, on this day fortnight, that our county and city members be requested to lay the case of Dr. F. T. Porter (late medical officer of the Castleconnell Dispensary district) before Parliament, with a view of ascertaining whether the Commissioners for administering the laws for the relief of the poor in Ireland, exceed the power vested in them by summarily dismissing, by sealed order, Dr. Porter from his office without a sworn investigation, or affording him the necessary information to enable him to disprove the authorship of a certain anonymous letter or letters (the alleged cause of dismissal); and if such arbitrary power had been given to the aforesaid Commissioners by law, that said law may be so altered as to afford the Poor-law medical officers of Ireland the same amount of justice granted to the most contemptible criminal—namely, a fair and impartial trial."

THE HIGHGATE INFIRMARY.—The Finance Committee of the Guardians of the Poor of St. Pancras have just made a return as to the entire cost of the Highgate Infirmary, about which so much uproar was created at the commencement of last year, when it was declared by its opponents that a sum of £100,000 would scarcely cover the outlay. The return which has been furnished by the guardians to the managers of the Central London Sick Asylum district as the total cost of the establishment, ready to be handed over to them, is £49,659 8s. 6d. The managers have referred the return to a committee to report, when the cost will be subdivided between the several parishes forming the district, and the parish of St. Pancras be recouped the difference between the entire cost and their own share or proportion of the expenditure.

FOOT-AND-MOUTH DISEASE IN DORSET. — About 400 cows have during the past few days been attacked by this malady in the district of Shaftesbury, and the magistrates have declared 48 farms infected. The returns show that at Gillingham the complaint has extended to an alarming degree. Mr. G. Dowding, of that place, has, for instance, 44 cows affected. At West Stower 42 head of cattle, belonging to Mr. Stephen Ailes, are suffering. At Buckhorn Weston Farm (Mr. Honeyfield's) 51 have been attacked. At East Stower and Kington Magna also the disease prevails. At Sherborne 31 farms within that division have been declared infected. The application to the Privy Council for stopping the markets and fairs has been refused by their Lordships; therefore, no restriction can be made. In the Yeovil district it is hard to find a farm where the disease has not broken out. At West Chinnock it has appeared among the herds of Mr. Oliver Harding, Mrs. Mudford, and Miss Ann Brown. In the Wells district the disease is fast dying out, upwards of 40 farms lately infected being now "free."

TURKISH MILITARY MEDICAL ORGANISATION.—Stephen Pasha has been sent to Vienna with a view of inducing young doctors of medicine and pharmaciens to enter the Turkish army, where the medical department is to be organised upon the Austrian footing. The pay is made very attractive.

Medical Appointments.

ANDERSON, J. F., M.D., has been appointed Medical Officer for the Hampstead South District of the Metropolitan Mutual Medical Aid Society.

BADCOCK, Dr. L. C., has been appointed Out-door Medical Officer for the Western District of the Brighton Union, vice Dr. Richardson, resigned.

BARRETT, J. J., M.D., has been appointed Medical Officer for the Lambeth District of the Metropolitan Mutual Medical Aid Society.

BLACKMAN, C. T., M.R.C.S.E., has been appointed Public Vaccinator for the whole of the Whitechapel Union, in the room of seven District Vaccinators whose appointments have been determined.

BUCK, A. H., L.R.C.P.Ed., has been appointed Medical Officer for the Kentish-town District of the Metropolitan Mutual Medical Aid Society.

BURN, J., M.R.C.S.E., has been appointed Medical Officer for the Hanley District of the Stoke-upon-Trent Union.

CLARK, Mr. A., has been appointed Senior House-Surgeon to the Middlesex Hospital, vice Mr. S. Pidwell, whose term has expired.

CROSER, T. H. B., M.R.C.S.E., has been appointed Medical Officer for the Kensington District of the Metropolitan Mutual Medical Aid Society.

CUMMING, Dr. (of Ore), has been elected Medical Officer for District No. 3 of the Hastings Union, vice W. Campbell, L.R.C.S.Ed., resigned.

DAVIDSON, Dr. A. D., has been elected Ophthalmic Surgeon to the Royal Infirmary, Aberdeen, vice A. Ogston, M.D., resigned, and appointed Surgeon.

DAVIDSON, Mr. J., has been appointed Junior House-Surgeon to the Middlesex Hospital, vice Clark, promoted to Senior.

DAVIES, N. E., M.R.C.S.E., has been elected Medical Officer for the North-West District of the Sherborne Union, vice W. H. Williams, M.D., resigned.

GOWLAND, J. E., M.D., has been appointed Medical Officer for the Holborn District of the Metropolitan Mutual Medical Aid Society.

HARRISON, E. T. D., M.R.C.S.E., has been appointed Medical Officer to the Forden Union Workhouse.

HILL, P. E., M.R.C.S.E., has been appointed Medical Referee to the Scottish National Assurance Company for the District of Newport, Monmouthshire.

LATHAM, W. H., M.R.C.S.E., has been appointed a District Surgeon to the Salford and Pendleton Royal Hospital and Dispensary, vice Thomas A. Somerville, M.R.C.S.E., resigned.

MACKENZIE, J., M.R.C.S.E., has been appointed Medical Officer for the Rocester District of the Uttoxeter Union, vice E. Alsop, M.R.C.S.E., deceased.

MAGOR, T., L.R.C.P.L., has been appointed Medical Officer for the Hornsey District of the Metropolitan Mutual Medical Aid Society.

MILLER, H., L.R.C.P.Ed., has been appointed Medical Officer for the Halford District of the Shipston-on-Stour Union.

NICHOLLS, H. H. J., M.R.C.S.E., L.S.A.L., has been appointed Resident House-Surgeon at the Brighton and Hove Lying-in Institution, vice E. Renshaw, M.R.C.S.E., resigned.

NORRIS, P. J., M.D., has been appointed Medical Officer for the Southern District of the Lancaster Union, vice J. Johnstone, M.D., resigned.

POPE, Dr. (late of Belfast), has been elected Medical Officer for the Tramore Dispensary District of the Waterford Union, vice Eaton W. Waters, L.K.Q.C.P.I., deceased.

PROVIS, W., L.R.C.P.Ed., has been appointed Medical Officer for the Biddenden District of the Tenterden Union, vice J. Chapman, M.R.C.S.E., resigned.

ROBINSON, R. B., L.R.C.P.Ed., has been appointed Medical Officer for District No. 3 of the Southmolton Union, Devon.

SANDFORD, H. V., M.D., has been appointed Medical Officer and Public Vaccinator for District No. 2 of the Bodmin Union, Cornwall, vice Monckton, appointed to District No. 4 of the Cuckfield Union.

SPEIR, W. R., M.B., has been appointed Medical Officer for the Eastern District and the Workhouse of the Haltwhistle Union, Northumberland, vice J. H. Buchanan, M.D., resigned.

WALLACE, F. W., L.R.C.P.I., has been appointed Medical Officer for the Hoxton District of the Metropolitan Mutual Medical Aid Society.

WATERS, J. H., M.B., has been appointed Medical Officer for the Kingsland District of the Metropolitan Mutual Medical Aid Society.

Births, Marriages, and Deaths.

BIRTHS.

ANDERSON.—On the 23rd ult., at Hulme, Manchester, the wife of Dr. Anderson, of a daughter.

ARMISTEAD.—On the 21st ult., at Archer's Lodge, Harpurhey, Manchester, the wife of W. Armistead, M.B., of a daughter.

BAINES.—On the 23rd ult., at Cranley-place, Onslow-gardens, the wife of M. Baines, M.D., of a daughter.

BURTON.—On the 23rd ult., at Nelson-street, Edinburgh, the wife of J. C. Burton, M.D., of a daughter.

CLARKE.—On the 18th ult., at Well-park, Oughterard, the wife of F. E. Clarke, M.B., of a son.
EWER.—On the 16th ult., at Porchester-square, the wife of C. W. Ewer, M.D., of a son.
GARSTANG.—On the 2nd ult., at Blackburn, the wife of Walter Garstang, M.D., of a daughter.
GRAHAM.—On the 20th ult., at Weybridge, the wife of A. R. Graham, M.B., of a daughter.
HENSON.—On the 29th ult., at Bond-street, Hull, the wife of S. Russell Henson, M.R.C.S., &c., of a daughter.
HORTON.—On the 15th ult., at Bromsgrove, Worcestershire, the wife of C. Horton, M.D., of a son.

MARRIAGES.

EVANS—BOWEN.—On the 20th ult., at Llanstinan, Pembrokeshire, Edward Higgon Evans, M.R.C.S.E., Surgeon R.N., to Mary Elizabeth Sarah, daughter of the Rev. W. C. Bowen.
LUIGI—BEST.—On the 21st ult., at St. Bride's Church, Liverpool, Vincenzo Mapei Luigi, M.R.C.S.E., of Golborne, to Emma Elizabeth Mary Best, of Liverpool, daughter of T. C. Best, Esq., and niece of the late George Pennell, Esq., of Southport.
MIDDLETON—HOGG.—On the 15th ult., at Edinburgh, John Middleton, M.D., Staff Assistant-Surgeon Army, to Miss Catherine Margaret Hogg.

DEATHS.

BINGHAM.—On the 26th ult., Robert Swift, infant son of George Bingham' Esq., of Stretford, and grandson of Dr. Pettinger, of Manchester.
GRAVES.—On the 1st ult., Alfred Burgess Graves, Surgeon, of Aston, Birmingham, aged 35.
OVERTON.—On the 13th ult., Georgiana Jane, wife of John Overton, Surgeon, of Coventry, in her 67th year.
PROCTOR.—On the 17th ult., of scarlet fever, at Ventnor House, Aston, Birmingham, Sidney Edmund, eldest son of Sidney Edmund Proctor, M.R.C.S.E., &c., in his 7th year.
ROBERTS.—On the 24th ult., at The Elms, Coningsby, Lincolnshire, John Robert, infant son of Thomas Andrew Roberts, M.R.C.S.E., L.S.A.
SPEER.—On the 1st ult., at Rathfarnham, Dr. T. C. Speer, late of the 5th Dragoon Guards, aged 65.
STODDART.—On the 3rd ult., at Grantown, John Stoddart, L.R.C.P.Ed., of Kirkcaldy.
WALLACE.—On the 4th ult., at Yoxhal, Dr. James Wallace, aged 63.
WILSON.—On the 20th ult., J. L. Wilson, M.R.C.S.E., House-Surgeon to the West Kent General Hospital, Maidstone, aged 38.

Medical Diary of the Week.

Monday, Oct. 3.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
METROPOLITAN FREE HOSPITAL.—Operations, 3 P.M.

Tuesday, Oct. 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.

Wednesday, Oct. 5.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
OBSTETRICAL SOCIETY OF LONDON.—7½ P.M. Council Meeting.—8 P.M. Dr. Martin (Melbourne): "Notes of a Case of Solid Fibrous Tumour of the Right Ovary; Ovariotomy. Recovery."—Dr. Hodder (Toronto): "Ovarian Multilocular Tumour; Ovariotomy; Death."—Dr. Copeman (Norwich), "On Tumours of the Pelvis obstructing Delivery."—Mr. E. J. Lowe (Burton-on-Trent), "On a Case of Hæmorrhage from Retained Placenta after Abortion, terminating fatally."

Thursday, Oct. 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, Oct. 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Oct. 8.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

ANTI-VACCINATION ORATORS.

WE perceive by some of the country papers that a few noisy opponents to the Compulsory Vaccination Act are yet doing the little they can to disturb the operation of what is a very necessary measure for the preservation of the public health. It is impossible for them to gainsay facts, and it will not be very easy to prevent reasonable people from drawing correct conclusions when the evidence is so clear. It is not so long ago that epidemics of small-pox used to devastate this land, killing thousands, and scarring the faces and blinding the eyes of those who survived the attack. Is that the case now? In Russia, where vaccination is *not* compulsory, the deaths are said to have averaged 130,000 per annum during the last 70 years. Recently small-pox has been prevailing in an epidemic form in Paris and New York, and its attacks among the unvaccinated are as severe as ever. That vaccinated people are attacked is true enough, but the disease is generally far less severe; and it ought to be remembered, on the one hand, that the susceptibility to the action of all animal poisons varies much in different people, and, on the other, that a permanent effect of these poisons on the system is not always attained. One attack of small-pox does generally, but not invariably, afford immunity from a recurrence of that malady, and the protective influence afforded by vaccination is probably equal to that conferred by a previous attack of small-pox. We have seen it argued by some that epidemics of small-pox are to be regarded as belonging to certain periods of history; that small-pox, like the scourges of the middle ages, had a certain run, as it were; and that its dying out as a disease was coincident with Jenner's discovery of the prophylactic power of vaccination. Now these statements are quite gratuitous, and opposed to the facts. Small-pox may be regarded, for instance, as endemic in certain parts of India; it kills the native population out of all proportion to the European troops in a locality where it is prevalent. Repeated observations have invariably led to one conclusion, that the number and severity of the cases of small-pox, where it is prevailing as an epidemic, are in direct ratio to the number of unprotected persons exposed to its influence. The outbreak at High Wycombe attained, for the size of the place, considerable proportions, and one of the main causes of this was the neglect of vaccination. There will always be people to take up any subject out of which a little capital can be made by platform orators. They do an infinity of harm, in that they influence the minds of those who have not the means of studying the facts impartially for themselves, and that must be our apology for noticing a subject to which our motto "Ne quid nimis" might be properly applied.

Dr. W. J. Stott.—The communication from the Honorary Secretary of the Manchester Medico-Ethical Society has been received.

A DISCLAIMER.

To the Editor of THE LANCET.

SIR,—I have been so busy during the past four weeks, partly owing to my father's absence from home, that I have not had a moment scarcely to write to you. Although you have already been made aware, through a letter from "The Writer of the Paragraph in the *Kelso Chronicle*," the receipt of which you have advertised, that neither my father nor myself had anything whatever to do with the paragraph in question, I beg to make the same statement. Neither of us ever furnished the least bit of information to anyone regarding the operation, which was the means of prolonging the patient's life, and the extraordinary details furnished by the writer in the *Chronicle* were a matter of as extreme surprise to us as to anyone else. So far from approving of such a thoroughly "unprofessional" course, my ideas on such points are such that I could not have done so. Indeed a letter to this effect would have appeared in the *Chronicle* shortly afterwards had it not been counteracted by the extreme haste of the party who sent you a copy of that paper containing the paragraph.

Now that you know the whole facts of the case, you would confer a great favour by mentioning the reasons of your language towards us—especially on my father's account, who has been engaged in active practice for nearly forty years, without ever having his name brought before the eyes of the medical profession in such a dishonourable manner. That you have been imposed upon by some one who wishes to affect our professional character, I cannot but believe, because the high position of THE LANCET in the world of medical journals would have utterly negatived the *possibility* of its condescending to take notice of any paragraph in an out-of-the-way country paper, unless its attention had been strongly directed to it by some peculiarly interested party.

Your obedient servant,
Kelso, September 21st, 1870. J. P. BOOKLESS, M.B., C.M.

*** We have much pleasure in inserting this letter. We had no other reason for writing as we did than our strong disapproval of the paragraph in question. Considering that Mr. Bookless shares our opinion that it was "thoroughly unprofessional" in its character, we think he will, on further reflection, understand why we wrote as we did. We gladly accept the disclaimer contained in the above letter, and only regret that it did not appear sooner.—ED. L.

WORKING MAN'S MEDICAL RELIEF CLUB.

M.D., F.R.C.S.E., alleges that an unqualified chemist announces a Medical Club in a handbill similar to one which he sends us; but the handbill is incomplete. We should be glad to see the identical handbill of the chemist.

THE WOUNDS CAUSED BY THE CHASSEPÔT, MITRAILLEUSES, AND NEEDLEGUN.

A PRUSSIAN correspondent writes us:—"As regards the general character of the wounds, it may be said that those inflicted by the French balls are vastly more dangerous than those of our own. The ball of the needlegun, being long and conical-shaped, tends to separate the tissues, and the wound in consequence shows a better tendency to heal. The chassepôt bullets, being round-shaped, tear the tissues, and, driven by a great mass of powder, they break and crack the bones in their path. The same is the effect of the mitrailleuse, and an enormous amount of serious wounds is caused by the French tactics of greeting the enemy with a hailstorm of lead. The spots of ground from which the French fired are at once known by their being covered with cartridges. Our army, composed of Hessian, Saxon, and Prussian regiments, lost on 18th August 20,000 in killed and wounded, and the French are said to have lost 10,000 men, so that this murderous battle involved a loss of 30,000 men. The scene on the battle-field on the following day was most terrible; heaps of dead covering the ground. The corps charged with performing the office of grave-diggers had hard work for three days. Our disposition of medical and sanitary arrangements proved to be very good, for no wounded men remained for any length of time upon the ground without aid."

Legis.—Such charges can be recovered in a County Court by a dentist whether possessing a surgical diploma or not.

THE SICK-CLUB SYSTEM.

To the Editor of THE LANCET.

SIR,—My unwillingness to occupy too much of your valuable space has hitherto deterred me from expressing my sentiments on the Sick-Club system, several letters on which subject have lately appeared in THE LANCET; but certain statements contained in a letter purporting to emanate from the Committee of the Weston Odd Fellows Lodge demand some notice from one so nearly concerned as myself in the matter at issue.

I will take the latter part of that letter first—viz., the paragraph in which the correctness of my brother's statements as to the exact number of members belonging to the class of large farmers is questioned. Not being myself in possession of a corrected list of members, I am not at this moment in a position to state precisely how many belong to the class mentioned; but this is a mere quibble, and does not all affect the question, for it matters little, for the sake of argument, whether there are half a dozen or a dozen members of the farmer class. It is the principle of the thing to which we, in common with the other medical men of the neighbourhood, object. Suffice it, that it is *an incontrovertible fact* that there are *several* members in the Lodge occupying as large farms as any in the district. To show that we are frequently called upon to attend people of this class as Club patients, I may state that for the last fortnight I have been in daily attendance upon a subscribing member of the Lodge, living three miles from my house, in whose fields I have counted more than forty cows grazing, not to mention a large flock of sheep and young horses. So much for the "exaggeration" spoken of by the Committee. There are also other members occupying a similar position whom we are frequently called upon to attend. One of these some years since we attended at a distance of five miles for several months with a severe attack of acute rheumatism with heart complication. This is the class of people which we decline to attend for *4s.* per member, and not labourers, small shopkeepers, and working mechanics, for whom the Society was originally intended, as a reference to the General Laws of as late a date as 1850 will show. This clause has been omitted from the more recent copies, and the object of the omission is now sufficiently evident.

You, Sir, I doubt not, equally with myself, must have been surprised to learn from the Committee that one of the candidates, described as a gentleman of extensive experience, should consider *3s. 6d.* per member remunerative, particularly in the case of a country Club, where the distance to be traversed extends to five miles from the place where the Lodge is held, and the same distance from the medical man's house; also that he should be ignorant of the fact that the majority, if not nearly all, of the Lodges in the district now pay *4s.*; nay more, I could name two Lodges which pay *5s.* per member.

As to the remunerativeness of *4s.*, even for a country Club, although that is not our grievance, I can say that we, or rather I myself, pay as much annually in tolls, which are very heavy in this district, as we receive for the year's attendance upon the 136 members of this one Lodge. Again, I can most positively state that neither my brother nor I ever said in the Lodge-room that "no man receiving more than *15s.* a week ought to be a member of a Friendly Society." Further, the accusation against my brother of a breach of contract in charging one of the farmer members as a private patient was brought forward in the absence of the member, and, *as he affirms*, without his consent. He at the time was suffering from the result of his own imprudence, and has subsequently been attended as a private patient under the same circumstances.

Since the Lodge determined to continue to admit any persons, "no matter what their position," to all benefits of the Lodge, we threw up our appointment, and do not at all regret having done so, as we feel certain of the moral, if not the active, support of all respectable members of the profession.

The inducement held out by the Clubs of the attendance upon the families of their members is, at least in this district, a delusion and a snare, and very closely resembles the Poor-law system of extras, which the poor deluded union doctor is led to expect will materially augment his otherwise meagre salary. The following is more nearly the real state of the case:—The other members of the family, if not also in a Club, often cheat the doctor by making use of the medicines sent ostensibly for the Club member, are prescribed for by the druggists, attend at the infirmary, or obtain gratuitous advice from neighbouring physicians, anxious, it is to be presumed, to extend their reputation—thus leaving very scant pickings indeed for the Club doctor.

I am, Sir, yours obediently,

Sandon, Stone, Sept. 21st, 1870. J. H. TYLECOTE, M.D.

Mr. Henry Palmer had better consult a medical man of repute, and follow his advice in the matter.

An Assistant.—We could not recommend our correspondent to accept the work in question as any guide in practice.

WATER-SUPPLY OF SOUTH LONDON.

THE medical officers of health to the Wandsworth District Board of Works have presented a Report on the Water-supply of the district, in which they say that the water of the Southwark Company has for a considerable period been occasionally found in so turbid a condition, and, upon standing, to deposit so large an amount of impurity, as to indicate that it had been insufficiently filtered. They state that at the time when diarrhœa was very prevalent in the district, the water "was indisputably bad," and that, although its condition has improved, the usual tests still show a considerable amount of organic impurity, whose presence has been further confirmed by microscopical examination. It is only fair that the Southwark Company should have the benefit of the following remark, which we extract from Professor Frankland's Report to the Registrar-General on the quality of the London Water-supply during the month of September:—"Of Thames water, that delivered by the Southwark and Grand Junction Companies contained the smallest proportion of organic elements."

A Subscriber can obtain what he wants at the General Lying-in Hospital, York-road, Lambeth; or at Queen Charlotte's Hospital, Marylebone-road.

CO-OPERATIVE STORES: SUGGESTION TO FORM ONE AT NETLEY.

To the Editor of THE LANCET.

SIR,—Pray allow me a corner in your columns to make a suggestion. I think it would be a great boon to many officers of the military medical services if an establishment on the co-operative system was formed at Netley for the supply of uniform and equipment at certain fixed charges. The present cost of articles obtained from military tailors is excessive, and is constantly spoken against by all classes of officers in the service; and I have little doubt that were an institution on the above system formed, it would be well supported. As all the young officers of both Royal and Indian medical services join at Netley, and very many others either embarking for or returning from foreign service pass through Netley, from there alone a good constituency would be formed. Few officers return from foreign service without needing a new equipment, and those embarking would need many articles suitable to their new stations. Then, again, the hundreds serving in different parts of the world would be continually needing supplies. Should the naval medical service receive their training at Netley, they would also form a body to be supplied. From its being so close to Southampton, articles could be very quickly despatched to different foreign stations, and also many fair workmen are from time to time discharged the service at Netley, from whom, no doubt, good operatives could be procured. A Committee formed at Netley, and securing in the commencement a good manager and first-class foremen, would soon command support, and any money needed would be easily secured by shares or subscriptions.

Although I dwell above on the supply of uniform more especially, I see no reason why plain clothes, books, and the various articles supplied by one's agents at home should not eventually be included.

I am, Sir, yours, &c.,

Bengal, August, 1870. I. V. R. C.

W. H. C.—We cannot supply a precedent; but if the particular charges are reasonable, we apprehend that the payment of them can be enforced. The patient is responsible for asking for particulars. We do not recommend the demand for this large sum; but we think it would be supported by a court of law, supposing the charges to be reasonable.

DRY CUPPING.

To the Editor of THE LANCET.

SIR,—May I be allowed to suggest an alteration in the method of dry cupping? I find that if the part of the patient which is to be cupped is smeared over with simple ointment, the cup, after being applied, is freely movable on the cutis. The exhaustion of air produced at first can be kept up for an indefinite time, thus doing away with any further use of the spirit-lamp, and (in the hands of inexperienced cuppers) the annoyance to the patient caused by heated cups. It is by no means necessary that the skin should be loose or swollen. Unless the vacuum is exceedingly great, no pain is caused the patient. It has been objected that patients will dislike the application of greasy matter,—I do not think with much truth.

Your obedient servant,

September, 1870. H. N.

Boompje.—We regret that we can give no information beyond that already published.

Enquirer.—The degrees mentioned are included in the terms of the order of the Poor-law Board.

ADVERTISEMENT OF NAMES OF MEDICAL OFFICERS OF HOSPITALS.

To the Editor of THE LANCET.

SIR,—Your last week's impression contains some severe editorial strictures on a gentleman who advertises a Provident Dispensary, of which he himself is the embodiment. But I should like to know what is the difference between advertising oneself and being advertised. I herewith send a batch of hospital and dispensary announcements from the Birmingham papers, and, no doubt, all other large towns can plead guilty to the same scandal. I was led to understand what is sauce for the goose is sauce for the gander.

On remonstrance, the Queen's Hospital, Birmingham, has discontinued advertising names; not so other institutions.

I am, Sir, yours obediently,

Birmingham, Sept. 26th, 1870. PERCY LESLIE, M.D.

*** Without admitting that this practice is to be compared with the personal advertisement on which we commented last week, we are quite ready to admit that it is improper, and to urge that it be discontinued. Advertisement in newspapers is bad for the professional mind and spirit.—ED. L.

MEDICAL ETHICS.

Mr. Crerar and Dr. Pearson.—We regret that we cannot find space for the correspondence between these gentlemen, which has been forwarded to us by Mr. Crerar for publication. We should gather that Mr. Crerar's treatment of the case was in a high degree judicious. As to the ethical merits of the case, we think Mr. Brown should have been either allowed to come as telegraphed for, or, at the least, paid a fee in consideration of the trouble and loss of time incurred in what he did in compliance with the telegram he received. The second telegram sent him, if our account be correct, was clearly uncandid and indefensible. But Mr. Brown was not available in consultation till the morrow, and the case was very serious. We do not see that it was unreasonable in the wife of the patient to wish for a consultation that night with Dr. Pearson. We cannot, therefore, see that Mr. Crerar was justified in refusing to meet Dr. Pearson. It is greatly to be regretted that consultations between local practitioners are not more encouraged than they are. Nothing would tend more to raise the respect of the public for us than for medical men to be respectful to each other, and glad to meet each other. Mr. Crerar says that on previous occasions Dr. Pearson had refused to meet him. If so, so much the worse for Dr. Pearson. The fact would go far to explain, though not to justify, Mr. Crerar in his refusal to meet Dr. Pearson in consultation. We repeat that Mr. Crerar's view and treatment of the case seem to us creditable to his professional judgment; but in a case of such urgency and moment, one medical man should be willing to meet any other medical man who is within the pale of professional courtesies, if by any means he can satisfy the feelings of a near relative.

NEW SYDENHAM SOCIETY: NIEMEYER'S LECTURES ON PHTHISIS.

To the Editor of THE LANCET.

SIR,—This last issue of the New Sydenham Society, a pamphlet of 71 pages, is admirably translated and carefully printed. Were it not that Dr. Bäumler has occasionally missed the English idiom, we might have thought he was a countryman of our own. I have only marked three passages as needing correction:—

Page 29, line 34, for "*Abig*," read "*Abig*."
Page 48, line 29, for "3·6," read "2·7."
Page 71, line 15, for "Nizza," read "Nice."

The rest of the volume, 90 pages, is advertisement. It was, doubtless, needful that it should all be printed, and perhaps it was good policy to keep it out of our waste-paper baskets by binding it up with so valuable a pamphlet. But if anyone wish to learn the value of the Society's past work, he will not find it easy. The two lists of the Society's works occupy about 13 pages. Each volume is entered in the order of publication, without any attempt at arrangement or classification. Each volume of Casper and each Year-book has a separate place, and the 26 plates of the Atlas figure as 9 fasciculi or volumes! The inquirer will gather a little more information from the list of surplus volumes, page 92; but if he should wish to purchase the seven Year-books, 1859—66, he will find that there are only six.

I am, Sir, yours sincerely,
Stoke Newington, Sept. 2nd, 1870. ROBERT H. COOKE.

THE PUBLIC SERVICES.

To the Editor of THE LANCET.

SIR,—In your leading article of Sept. 17th on the Naval Medical Department, you gave various reasons why assistant-surgeons cannot be procured for the navy; but I think you have omitted the real cause. This is a purely social one. There is a ceaseless attempt on the part of the Admiralty to degrade their medical officers. In Mr. Childers' last scheme they are considered after engineers, chaplains, and paymasters, and are lumped with men for the same retirement who in civil life are socially much their inferiors, putting education out of the question. Then, again, why are they insulted with the title of "civilians"? A man who risks his life in all climates, and amidst the same dangers, is no more a civilian than the self-styled "executives." Were the medical officers of the *Captain* less military than their brother officers?

This device on the part of the executive authorities to take away from the medical officers of both services those social privileges which go, according to the late Lord Palmerston, so far in making the service attractive, is shown also in the army, where the regimental surgeon, who is obliged to subscribe larger sums to the mess and band funds than even the commanding officer, has no status at the mess-table, and is ignored by the band sergeant, when the band plays in public, if only a subaltern is present.

It is greatly to be hoped that these matters will be thoroughly considered, and that the medical department will have a proper share in their consideration when the day comes to contrast our organisation with that of Prussia; and should the present injustice to regimental medical officers be persisted in, the sooner the change to the general staff system is made the better.

I am, Sir, yours faithfully,
September 20th, 1870. A CRIMEAN SURGEON.

CASE OF COMPOUND DISLOCATION OF THE ANKLE-JOINT.

To the Editor of THE LANCET.

SIR,—Some months ago, G. S——, aged eight years, fell down a bank, and sustained a compound dislocation of the ankle-joint. The tibia was dislocated inwards, the end of which protruded an inch. The wound was clean cut, and there was considerable hæmorrhage. The only injury to the bones appeared to be a separation of the shaft from the epiphysis of the fibula. The dislocation was very easily reduced; "cold" lint bound round the joint, and the leg put up in common splints. He had a discharge of pus through the wound for seven or eight weeks; the wound was then dressed with carbolic-acid lotion, and gradually healed. He kept his couch for six weeks, and used crutches for a few weeks afterwards. Now he plays about with other boys, and his manner of walking would hardly attract one's attention. He has considerable ante-ro-posterior, but very limited lateral, movement of the joint.

I am, Sir, yours truly,
Bloxham, August 15th, 1870. JOHN K. HYDE.

THE INMATES OF THE LIVERPOOL WORKHOUSE.

Mr. Hagger corrects an error in our statement of the number in the workhouse of Liverpool. The whole number, including infirm and all other cases, is 1635—viz., 1499 in the workhouse proper, and 136 in the branch establishments. He does not impeach the accuracy of our statements concerning the number of fever cases, which must involve the medical officers in very arduous duties.

Inquirer.—We do not prescribe. Our correspondent had better consult some respectable medical man.

LIFE-LIKE IN DEATH.

To the Editor of THE LANCET.

SIR,—A few days since the general public was excited by the account of a "headless horseman," who was seen riding furiously at the battle of Woerth. The few following cases, taken from notes during the late American war, will bear some analogy to the above.

After the battle of Savage's Station, situated on York River Railroad, from White House on the Pemunkey to Richmond, the capital of Virginia, on the retreat of General M'Clelland from the Chickahominy, the rear guard of the North formed line of battle across the railroad to contest the advance of the enemy, also to give time for removal of military stores and ambulances. The Union forces were uncovered, with the exception of a portion of their left, which was in the woods. The South centre then facing the left centre of Union troops, a deadly encounter took place. After the battle, leaning against a tree, a soldier was found, perfectly stiff in death, in the posture of last in life. His gun was brought to the shoulder in the act of firing; cheek pressed against stock; left eye closed; right open, glancing along the barrel; gun unfired.

2nd. Body in perpendicular against a tree; gun to ready; head forward for the purpose of observing sight for aim; was struck in this position, ball entering nasal eminence, passing out below occipital protuberance.

3rd. One knee resting on ground; rifle grasped in left hand for purpose of loading; cartridge in right hand about an inch from mouth, the end having been bitten off.

4th. At the battle of Antietem, State of Maryland, in front of the Old Church, on road from Shaftsbury to Hagger's Town, an artilleryman in Henrico's Battery (General Stonewall Jackson's army), while in the act of "thunching," was killed by a ball in the forehead. He remained stiff and fixed.

These are but a few; others might be quoted.

Your obedient servant,
Kensington, September 6th, 1870. LOGAN D. H. BUSSELL.

A CARD.

THE following card is, we are informed, being extensively distributed:—

"Dr. Allen, Physician, Surgeon, and Accoucheur (formerly of the Indian Service, General Board of Health, Queen Adelaide Lying-in Hospital, Sea-bathing Infirmaries, Margate, National Artillery Association, &c. &c.)

"DISPENSARY, 46, Sutherland-gardens, Westbourne Manor, Harrow-road, W. Dr. Allen attends every morning before 11 o'clock, and evening after 7 o'clock, when the charge for consultation, including medicine, is one shilling adults and sixpence children. Midwifery; vaccination."

It is, we suppose, on the principle adopted at places of public entertainment, to which children are admitted at half price, that Dr. Allen charges one shilling for adults and sixpence for children for consultation and medicine.

Mr. F. J. Timbrell.—We do not know that the articles are supplied by any firm besides those mentioned.

CHLORALUM.

To the Editor of THE LANCET.

SIR,—I fear Dr. Gamgee will find his name for the new antiseptic a very unfortunate one, and extremely likely to lead to the very mistakes it is intended to guard against. Chloralum and chloral are too similar to render the occurrence of mistakes at all remarkable. Both these substances are, in addition, *hydrates*.

Yours truly,
September, 1870. WORLI.

EGYPT FOR INVALIDS.

To the Editor of THE LANCET.

SIR,—As one who has spent several months in Egypt in the winter of 1861, I must unhesitatingly deny that the climate in that country is unhealthy and unsuitable for invalids, as stated by Dr. J. H. Bennet in a late number of your journal. On the contrary, I never lived in a more beautiful climate, the weather there being delicious, and everything that the most fastidious could desire. I allude more particularly to Cairo. Alexandria is not so healthy nor so pleasant to reside in. There is certainly a cool air early in the morning and towards evening; but, this being known, invalids and others can be prepared for it by using additional clothing, and taking other precautions.

As regards sanitary arrangements, I grant they are not first-class; but Dr. Bennet's assertion, "that Alexandria and Cairo are two of the most unhealthy towns in the world, where zymotic diseases are rife, and where typhoid fevers approximating to the plague may be said to be ever lurking," I must, from my experience, contradict; and I can hardly credit that the author of the above disparaging remarks ever visited the country he writes about.

In reference to another of Dr. Bennet's assertions, that even passing travellers suffer from diarrhœa in Egypt, my experience has shown that diarrhœa almost invariably attacks strangers on arriving in any warm climate, partly arising from the heat, but principally from the change in diet.

In conclusion, I may state that after an extensive acquaintance with various places in different parts of the world, I still prefer immeasurably the Egyptian climate beyond all others as a health resort for invalids and others requiring change of air.

Your obedient servant,
Dublin, September 27th, 1870. CHARLES H. ROBINSON.

THE "PECULIAR PEOPLE."

THE prosecution of the Savilles, husband and wife, members of the sect called "Peculiar People," on a charge of manslaughter springing out of the death of their child, seven months old, from diarrhœa, which it was alleged might have been arrested by medical treatment, has resulted in an acquittal. The medical gentleman who made a post-mortem examination of the body did not feel himself justified at the trial in asserting that if a medical man had been called in the child's life would have been saved, and thereupon the judge ruled that there was no case against the prisoners. That "peculiar people" of adult age should be at liberty to dispense with medical assistance, if it so pleases them, we do not deny; but we do contend that the lives of helpless infants ought not to be sacrificed to an absurd superstition like that of the "peculiar people."

THE INDIAN MEDICAL DEPARTMENT.

To the Editor of THE LANCET.

SIR,—I beg to endorse the opinion expressed by "Medicus" in his letter which appeared in your issue of July 9th.

Another crying evil is the double medical administration of gaols. The Inspector-General of Gaols in Bengal was some time ago constituted Medical Administrator to supervise the practice of the civil surgeons in medical charge of these institutions. This medical administration had been hitherto most satisfactorily conducted, and, strange to say, is still partly carried on by the Deputy Inspector-General of the Indian Medical Department, to whom medical returns of gaols are still sent for transmission to the Inspector-General of the Medical Department. These officers visit the gaols much more frequently than the Inspector-General of Gaols does, and must, therefore, be much better judges of the medical practice in these institutions. Indeed the Reports of Inspectors-General of Gaols and Sanitary Commissioners consist of windy efflorescences of type, interspersed with aphorisms and platitudes, to a great degree useless, except as a sort of pledge to the Government that the officers in question have done something towards earning their salaries. All the statistical information they really do give is generally submitted by Deputy Inspectors-General of Hospitals in a condensed form long before the ponderous tomes of Sanitary Reports, &c., are forthcoming. Never in the course of my life have I waded through such a mass of print as I have lately done while perusing the Reports of these Sanitary Commissioners and Head Gaolers. The only one who has condensed his Report within reasonable compass is the Sanitary Commissioner of Oudh. In none of them is there anything very original. They are simply made up of Reports from the different civil surgeons, and extracts by the Commissioners &c. from Parkes's Hygiene and other standard works on Sanitation. Such original matter as does crop out consists of chimerical suggestions, which the Government will not take up owing to the absurd expense they would involve.

The long and the short of it is, Sir, that the Indian medical service is doomed. These Sanitary Commissioners of whom "Medicus" complains and the medical administrative powers granted to the Inspector-General of Gaols constitute the small end of the wedge. They now perform a portion of the work formerly done by Deputy Inspectors-General of Hospitals. The next "drive" will be the abolition of these officers, the reason alleged being that they have not enough to do! The tendency of matters at present is to crush and stamp out the little *esprit de corps* the Indian Medical Department has left in it, to destroy its independence as a body; to put it under a secretariat, possibly lay, or at any rate one composed of members of its own body, in whom it can place no trust, leaving it without hope or remedy.

Can you now understand, Sir, the reason why the Indian medical service is closed for the present? It is to be "remodelled." Everbody now knows what that phrase means.

Your obedient servant,

August, 1870. DELTA.

A USEFUL INVENTION.

MESSRS. DUGGAN, of Bristol, have patented an arrangement for procuring a supply of hot water and diffusing steam in the sick-room by means of a lamp, in which the various combinations of paraffin and petroleum may be safely burned. The apparatus is portable, and is capable of dissipating about a pint of water per hour. Considerable care is needed to prevent smell and smoke; but in all other respects the patented apparatus is admirably adapted to meet the object sought for.

PAY OF ASSISTANTS.

To the Editor of THE LANCET.

SIR,—I hope you will excuse the liberty if I ask you to insert the following particulars regarding the pay of medical assistants, to which class I unfortunately belong.

The duty of an assistant is generally very heavy, and his salary very low. I have been about thirty years a dispenser, and of late years received a salary of about £35 per annum, board and lodging, and am required to visit, dispense, vaccinate, cup, bleed, extract teeth, and attend midwifery. Now, I should like to know how a married man, his wife, and family, can exist upon that. Surely something could be done to increase their pay; and I think by your inserting this it would induce the principals to pay their assistants better, and place them upon a better footing than a mechanic or a labouring man.

Yours sincerely,

London, September 24th, 1870. JOHN ATKINSON.

SICK CLUB FOR PROFESSIONAL MEN.

To the Editor of THE LANCET.

SIR,—In answer to many inquiries, will you permit me to state that the Liver Insurance Company, Limited, is not yet in working order, for want of some permanent directors. The qualification is 100 shares of £1 each, three-eighths paid up—i. e., £37 10s. The remuneration will be £100 per annum by the articles of association. The present directors are only temporary.

I am, Sir, your obedient servant,

Finborough-road, S.W., Sept. 26th, 1870. E. B. BOGG, M.D.

EVERY communication, whether intended for publication or otherwise, must be authenticated by the name and address of the writer. Papers not accepted cannot be returned. Articles in newspapers, to which attention is sought to be directed, should be marked. Communications not noticed in the current number of THE LANCET will receive attention the following week.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Murchison; Dr. Hyde Salter; Prof. Berry, Manchester; Mr. Yeo; Mr. Anton, Manchester; Dr. Lushe; Mr. Turnbull; Dr. Fussell, Auckland, New Zealand; Mr. Holmes, Bridgnorth; Mr. O'Connor, Larne; Mr. Notley; Mr. Davies; Dr. Warder, Haulbowline; M. W. le Verrier, Lyons; Dr. Proctor, Aston; Mr. Matthews; Mr. Hoyroyd; Mr. T. Wood; Dr. Orton, Narborough; Dr. Waters; Mr. Douglas; Mr. Roberts; Mr. Bowes, Crawley; Dr. Scott, Manchester; Mr. Atkinson; Mr. Craven; Mr. Jenkinson; Mr. Graham; Dr. Warren, Auckland; Mr. Wheeler; Mr. Barnes, Lincoln; Mr. Lamprey; Mr. Pope, Liverpool; Mr. D. Thomson, Higham Ferrers; Mr. Edwards, Tunstall; Mr. Mitchell, Exmouth; Mr. Black; Dr. Provis, Biddenden; Dr. Herbert, Mullingar; Mr. Palmer; Mr. De Fraine; Dr. Fairbank, Lynton; Mr. Collier; Mr. J. Henry; Mr. Mowbray; Mr. O. Pemberton, Birmingham; Dr. Mackintosh; Dr. Schmith; Dr. Sutton; Mr. Pulteney; Mr. W. Reeves, Scarborough; Mr. Evans; Dr. Anderson, Edinburgh; Dr. Gervis; Mr. Thomas, Llanelly; Mr. Sharpe; Mr. Hardie, Manchester; Mr. J. Gream, Wadebridge; Mr. C. Hogg; Dr. Garstang, Blackburn; Mr. Grove; Mr. G. Ware, Canterbury; Mr. Hill, Newport; Mr. Wallis, Chichester; Mr. Elkins; Mr. Hampson, Manchester; Mr. Wakefield; Mr. Stevens; Mr. Broome, St. Ives; Mr. Brown; Mr. Jackson, Pontypool; Dr. Remy; Dr. Bogg; Mr. J. Munyard; Dr. Buchanan, Glasgow; Dr. Sheehy; Mr. Flower, Guildford; Mr. Dray, Canterbury; Mr. Hughes, Liverpool; Mr. Hoyle, Ilkeston; Mr. Mason, Uppingham; Mr. Rivers; Dr. Leslie, Birmingham; Mr. Heywood; Dr. Gray; Mr. Edis, Gloucester; Mr. W. Johnson; Dr. Rowe; Mr. Alexander; Mr. Nevil; Mr. Bookless; Dr. Burns; Mr. Deane; Mr. Hawker; Mr. Tuck; Dr. Johnson, Liverpool; Mr. J. Jones; Mr. Dixon; Rev. J. L. Short, Sheffield; Mr. J. B. Watkins; Mr. Walker; Dr. Campbell, Burra; M.D., Bath; Inquirer; An Assistant; One who would Provide for the Evil Day; Boompje; W. F. D.; X. Y. Z.; A Prescriber; M.D; Gamma; J. B.; A Subscriber; Logis; A. H. K.; Medico-Chirurgico; J. E. P.; Medicus; &c. &c.

Medical Temperance Journal, Isle of Wight Observer, Bruce Herald, Dunedin Evening Star, New Zealand Herald, Bridgwater Mercury, Croydon Chronicle, Shield, Norfolk Chronicle, and *Western Daily Express* have been received.

NOTICE TO SUBSCRIBERS.

ON and after the 1st of October the numbers of THE LANCET, in conformity with the New Regulations of the Post-office authorities, will be issued in an unstitched form only. The terms of Subscription after the above date will be as follows:—

UNSTAMPED.				STAMPED. (*Free by post.*)			
One Year	£1	10	4	One Year	£1	12	6
Six Months	0	15	2	Six Months	0	16	3
Three Months	0	7	7	Three Months	0	8	3

Post-office Orders in payment should be addressed to JOHN CROSS, THE LANCET Office, 423, Strand, London, and made payable to him at the Post-office, Charing-cross.

An Edition of THE LANCET, printed on THIN PAPER, for FOREIGN and COLONIAL CIRCULATION, is now published Weekly, and can be obtained from any Bookseller or Newsvendor, or from the following Special Agents:—

EDINBURGH: Messrs. MACLACHLAN & CO.
DUBLIN: Messrs. FANNIN & CO.
PARIS: Mr. BAILLIERE, 17, Rue de l'Ecole de Médecine.
NEW YORK: Messrs. WILLMER & ROGERS.
BALTIMORE, UNITED STATES: Messrs. KELLY, PIET, & Co.
MONTREAL: Messrs. DAWSON BROTHERS.
CALCUTTA: Messrs. BARHAM, HILL, & CO., and Messrs. THACKER, SPINK, & CO.
BOMBAY: Messrs. THACKER, VINING, & CO.
MELBOURNE: Mr. GEORGE ROBERTSON,
SYDNEY: Mr. W. MADDOCK.
ADELAIDE: Mr. W. RIGBY.
CHRISTCHURCH, NEW ZEALAND: Mr. J. T. HUGHES.

TERMS FOR ADVERTISING IN THE LANCET.

For 7 lines and under	£0	4	6	For half a page	£3	12	0
For every additional line	0	0	6	For a page	5	0	0

The average number of words in each line is eleven.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.